

WL-TR-97-4036

TRACTION DATA ANALYSIS

Part 2: Behavior of Some Aerospace Fluids and Lubricants



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Table of Contents

| | |
|---|------|
| 1. Executive Summary | 1-1 |
| 2. Traction Data Set A: 85-42 MIL-L-7808 | 2-1 |
| 3. Traction Data Set B: Mobil RL-714 | 3-1 |
| 4. Traction Data Set C: Shell ST-78 Gear Oil | 4-1 |
| 5. Traction Data Set D: MLO 89-105 Coray 100 | 5-1 |
| 6. Traction Data Set E: MLO 89-126 Coray 100 after 30.5% evaporation | 6-1 |
| 7. Traction Data Set F: MLO 93-192 PAO + 16.5% VI improver + Additives | 7-1 |
| 8. Traction Data Set G: MLO 84-473 95% PAO + 5% Bardahl antiwear additive | 8-1 |
| 9. Traction Data Set H: MLO 81-288 VacKote | 9-1 |
| 10. Traction Data Set I: MLO 81-288 VacKote /Sample #2 | 10-1 |
| 11. Traction Data Set J: MLO 90-715 Hatcol 3110 | 11-1 |
| 12. Traction Data Set K: MLO 90-715 Hatcol 3110 /Sample #2 | 12-1 |
| 13. Traction Data Set L: MLO 91-119 Pennzane | 13-1 |
| 14. Traction Data Set M: MLO 89-180 VistaLube 7 | 14-1 |

FOREWORD

This report documents the second and final set of traction data and model correlations obtained under this effort. The first data set was reported in the interim report, WL-TR-95-5056. All the experimental data were obtained at the Air Force Materials Directorate (WL/MLBT). The effort was carried out under Air Force Contract F33615-92-C-5902 with Mr. Shashi K. Sharma (WL/MLBT) as the Air Force Technical Monitor.

1. Executive Summary

Introduction

Lubricant behavior as a function of the operating variables in rolling/sliding contacts has proven to be critical in controlling performance of mechanical components such as rolling bearings, gears and cams. Lubricant traction, in most cases, is the primary force which contributes to acceleration of bearing elements, and thereby affects the overall dynamics and stability. Lubricant rheology has, therefore, been a subject of considerable interest over many years. Aside from classical Newtonian models where the lubricant behavior is modeled in terms of viscosity variation as a function of pressure and temperature, a number of investigations have considered visco-elastic effects, where, in addition to viscosity, properties such as shear modulus and critical shear stress define the lubricant behavior. Although both types of these models may provide acceptable prediction of traction behavior, there are two general problems when applying the models for practical design: first it is extremely difficult to independently measure the required fundamental properties, and secondly mathematical complexity of the models require a substantial amount of computing effort and, therefore impose significant restrictions on practical use of component performance simulation models, such as bearing dynamics computer codes. A viable approach has been to experimentally measure the traction behavior and then back fit the data to simplified models to estimate the constitutive constants by regression analysis. Such an approach, although weak in providing physical justification to specific behavior, does provide reasonable prediction of traction with a minimum of computing effort. These semi-empirical models therefore become immediately useful to component models for practical design and performance simulation. The present investigation considers such an approach for a number of lubricants particularly used in a wide range of aerospace applications.

Experimental

As done in many past investigations [1-3], a rolling disk type of apparatus constitutes the basic foundation of the experimental investigation. Briefly, a pair of disk specimens are driven independently when a radial load is applied to form a concentrated contact. The rotational velocities of the disks are varied such that while the difference in the two surface velocities increases, sum of the two velocities is kept constant. Thus the rolling speed remains constant while the sliding velocity is varied. Torque transducers on one of the disk specimens measures the torque, which can be easily converted to traction force or traction coefficient, defined as a ratio of the traction force to applied normal load. The torque and slip signals are fed to a data acquisition system where the data may be digitized and stored for later processing. The experiment is repeated over a range of applied load, rolling velocities and operating temperatures. Such a data base is generated for each lubricant to be modeled.

Test Specimens, Lubricants and Operating Conditions

The number of fluids considered in the current investigation along with the geometry of disk specimens are summarized in table 1. The combination of varying crown and rolling radii result in a

range of contact ellipticity ratio from one, corresponding to a circular point contact, to infinity for a pure line contact. General characteristics and a brief description of each of the test fluids is presented below:

Lubricant A: MIL-L-7808: This is a very common lubricant used in gas turbine engines for a wide range of military aircrafts. Studies of traction behavior and overall rheology of this fluid has been of considerable interest over the past couple of decades. Some of the most recent investigations [4-6] have been devoted to modeling visco-elastic effects and their significance in overall effect on rolling bearing behavior in a gas turbine engine.

Lubricant B: Mobil RL-714: This fluid is a PAO (polyalphaolefin) synthetic hydrocarbon base oil used in automobile oils, industrial lubricants and greases.

Lubricant C: Shell Turbo-78. Shell turbo-78 is a lubricating oil for steam turbines and gears and similar moderate service applications. It conforms to the MIL-L-17331G, Amendment 1, specification.

Lubricant D: MLO 89-126 Coray 100: Primarily for space applications, this lubricant is a naphthenic mineral oil formulated with tricresylphosphate (TCP).

Lubricant E: MLO 89-126: This fluid is same as lubricant D (Coray 100) after 30.5% evaporation by weight.

Lubricant F: MLO 93-192: This is an experimental hydraulic fluid formulated with a PAO (polyalphaolefin) base oil, 15.6% of a viscosity index improver and other additives.

Lubricant G: MLO 84-473: Another fluid, for space applications, formulated with 95% PAO base oil with 5% Bardahl antiwear additive.

Lubricant H: MLO 81-288 VacKote: Also for space applications, this fluid consists of 95% paraffinic mineral base oil (Apiezon-C) and 5% Bardahl additive.

Lubricant I: MLO 81-288: Another sample of lubricant H.

Lubricant J: MLO 90-715: This is a di-2-ethylene sebacate ester base oil.

Lubricant K: MLO 90-715: Another sample of lubricant J.

Lubricant L: MLO 91-119 Pennzane: This is a multialkylated cyclopentane oil based space lubricant.

Lubricant M: MLO 89-180 Vistalube-7: Also for space applications, this is an alkylbenzene base oil.

The inlet temperature in all cases varied in the range of 300 to 422 °K, while the range for rolling speed was approximately 2 to 20 M/S. Contact loads were varied to produce a variation of contact stress in the range of about 0.30 to 2.0 GPa.

Viscosity-Pressure-Temperature Relations

As will be discussed later, the computation of lubricant film thickness in the contact requires the viscosity-pressure-temperature relation at moderate pressures. While this data was available in the literature for some of the test fluids, the viscosity was actually measured as a function of pressure and temperature for several of the test fluids. In all cases a relationship of the following form is

used:

$$\mu = \mu_o \left\{ \exp \alpha p + \beta \left(\frac{1}{T_o} - \frac{1}{T} \right) + \gamma p \left(\frac{1}{T_o} - \frac{1}{T} \right) \right\}$$

where μ is the viscosity at pressure p and temperature T , μ_o is the reference viscosity at reference temperature T_o , and α , β , γ , are respectively the viscosity-pressure, viscosity-temperature and viscosity-pressure-temperature coefficients.

The experimental viscosity data are curve fitted to the above equation and the various coefficients are computed by regression analysis. Typical fit is shown in Figure 1, and the computed coefficients for the test fluids, considered for traction modeling, are summarized in Table 2.

Data Preprocessing

The raw experimental data consist of disk rpm and torque, as measured by a transducer on one of the disks. The data are generally plotted as torque versus the difference in the rpm of the two disks, which corresponds to relative slip. The relative slip is varied from a negative to a positive value. The first step in data preprocessing is to compute the effective data origin. This is done by simply integrating torque with respect to the slip velocity. Since the magnitude of slip velocity at the first and last data point are closely identical, and the directions of slip at these two extreme points are opposite to each other, the integrated torque value may be used to compute a mean value, which by symmetry corresponds to a torque value at zero slip. This value is, therefore, subtracted from the torque data to compute the effective data origin. With the given normal load, and appropriate scale factors, the torque data may now be converted to traction coefficient versus slide-to-roll plots. Since the traction coefficient should not depend on the direction of slip, the traction curve may be folded over about the zero point. These two folded curves may now be used to compute a mean traction coefficient at a given slide-to-roll value. Also, the data may now be sampled to select a set of points which may be subsequently used in traction modeling.

Data Selection for Traction Modeling

Although the experimental data are obtained over a broad variation of rolling velocity, it may not be possible to analytically model traction when the lubricant film thickness is less than a certain critical value, which is generally taken as three times the composite rms roughness of the two disks. Using such a criterion, the data at very low film thickness is excluded from traction modeling work.

Traction Modeling Procedure

The approach for traction modeling is based on the work by Gupta [7], which is actually after the earlier work by Kannel and Walowit [8]. This model is essentially based on Newtonian behavior of the fluid in the contact zone, where the pressures are significantly higher than those at which the lubricant viscosity data, discussed above, is available. Thus another, some what simplified, viscosity relation is assumed to define lubricant traction:

$$\mu = \tilde{\mu}_o \exp \{ \tilde{\alpha} p + \tilde{\beta} (T_o - T) \}$$

where $\tilde{\mu}_c$, $\tilde{\alpha}$, and $\tilde{\beta}$ are the effective coefficients which define the viscosity behavior in the high pressure contact zone.

With the above assumption of lubricant behavior, traction modeling consists of two steps: first the lubricant behavior under ambient pressure is used to compute the lubricant film thickness, and then the energy equation is solved through the film to compute the shear stress distribution, using the above "effective" viscosity relation. The shear stress is, of course, expressed in terms of the three unknown coefficients. The computed shear stress is then integrated to compute the total traction force and thus a traction coefficient is computed in terms of the three coefficients in the viscosity relation. A least squared regression analysis of the available experimental traction data is now performed to compute the three coefficients, for best fit of the model to the experimental data. Analytical details of the model are omitted here, since a complete formulation has been published in earlier work [7].

As shown earlier [7,8], the above simplified model results in an almost closed form solution, once the three constitutive constants, $\tilde{\mu}_o$, $\tilde{\alpha}$, and $\tilde{\beta}$ are known. In addition the lubricant properties vary as a function of pressure and temperature throughout the contact. Such a property variation results in an acceptable simulation of all thermal effects. Such properties of this model make it computationally very efficient, and model implementation in practical design tools, such as rolling bearing dynamics analysis [9], becomes quite straight forward.

An alternate approach to model traction behavior is based on visco-elastic effects [4-6, 10]. Here, the pertinent lubricant properties, in addition to viscosity, include shear modulus and critical shear stress beyond which the viscous effect becomes significant. Again the properties may vary with pressure and temperature. However, the model is computationally more complex and generally requires integration of a differential equation through the lubricant film, and therefore, model implementation to practical design tools is somewhat more difficult. In view of such limitations in practical use of the model, the current effort is restricted to simplified Newtonian models where the lubricant behavior is completely prescribed in terms of viscosity-pressure-temperature relations, as discussed above.

Results

Figure 2 shows typical correlations of the experimental data for lubricant A (MIL-L-7808) to the traction model predictions. The closeness of this fit is not surprising since most of the past traction model development [1-7] effort has centered around this lubricant. Model coefficients over the range of operating conditions considered are summarized in table 3.

Model fit to lubricant B: Mobil 28 base oil, is also fairly good as seen in figure 3. The estimated coefficients for this lubricant are summarized in table 4. Typical correlations for the gear oil, lubricant C, are shown in figure 4 while the coefficients are tabulated in table 5. Although the fit in this case is not as good as that for lubricant A and B, it is quite acceptable.

Data correlation to the model for lubricant D and E are somewhat marginal, as shown in figures 5a and 5b. While the fit is reasonable at high contact pressures, the discrepancy increases with

decreasing contact pressures. Perhaps introduction of pressure-temperature coefficient in the effective viscosity relation may provide some improvement. The difference in traction between the new and used lubricant is rather negligible; the small difference seen by comparing figures 5a and 5b may very well be attributed to the small difference in contact pressures in the two cases. Model coefficients, as computed by regression analysis, are summarized in tables 6 and 7 for these lubricants.

For the common PAO base fluids, lubricant F, used extensively for aerospace applications, the model fit is very good, as seen in figure 6. Behavior of lubricant G is expected to be very similar to that of lubricant F. Thus the coefficients summarized in table 8 may be used for both lubricants F and G.

Test cases H and I correspond to the same lubricant, VacKote. The only difference in these two cases is the contact ellipticity ratio, which is 4.68 and 6.62. Model fit to the experimental data is quite acceptable as shown in figures 7a and 7b. The small difference in traction in these two cases may be attributed to the small difference in contact pressures, which would indicate that traction may remain unchanged as a function of contact ellipticity if the contact pressure is maintained constant. Model coefficients for these two cases, as obtained by the regression analysis, are summarized in tables 9 and 10.

Cases J and K correspond to contact ellipticity ratios of 4.461 and 1.055 respectively for the Hatcol 3110 lubricant. The model fit is quite reasonable at low pressures, as shown in figure 8b but under low pressure conditions the deviation is quite large, as seen in figure 8a. Also, note that the change in effective pressure-viscosity coefficient, as determined by the regression analysis, in the two pressure ranges. Detailed results of the regression analysis are documented in tables 11 and 12 for the two test conditions. It is interesting to compare the lowest load data in figure 8a to that at the highest load in figure 8b. These two sets of data are at the same contact pressure but the ellipticity ratios are greatly different; the higher ellipticity ratio results in a somewhat higher traction. The effect may be contributed to significant side leakage in case of a circular contact corresponding to an ellipticity ratio of one.

Conclusions

Experimentally measured traction behavior of several fluids and lubricants for aerospace application seems to fit reasonably well with a simplified traction model based on a Newtonian viscosity-pressure-temperature relation. The effective coefficients of the model are derived by a regression analysis of the experimental data. Comparison of the experimental data to model predictions shown acceptable correlations. Thus the estimated model coefficients may be used to predict traction in practical applications with acceptable confidence.

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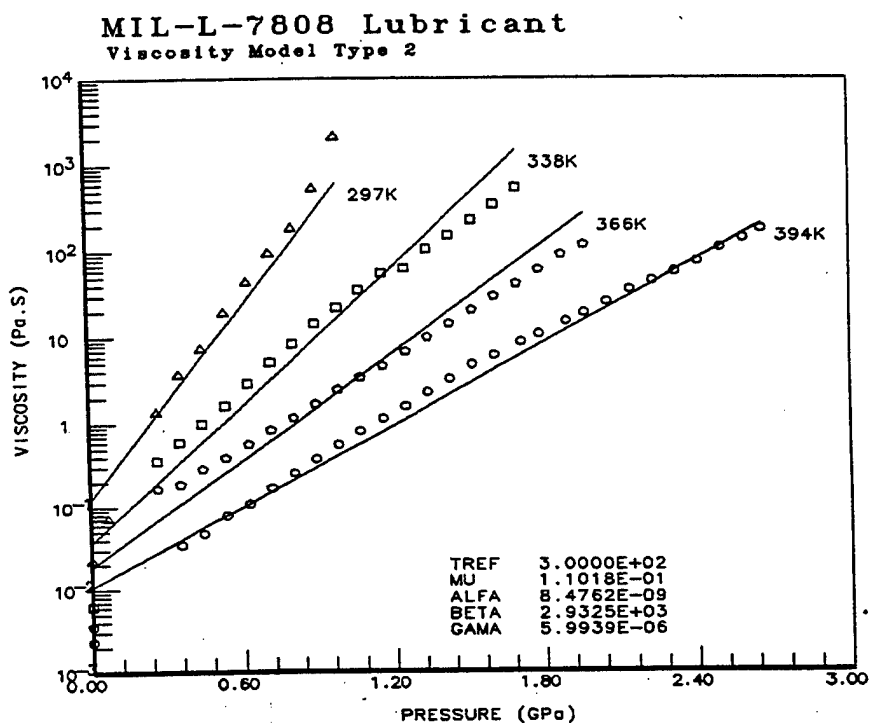


Figure 1.
Typical viscosity-pressure-temperature data.

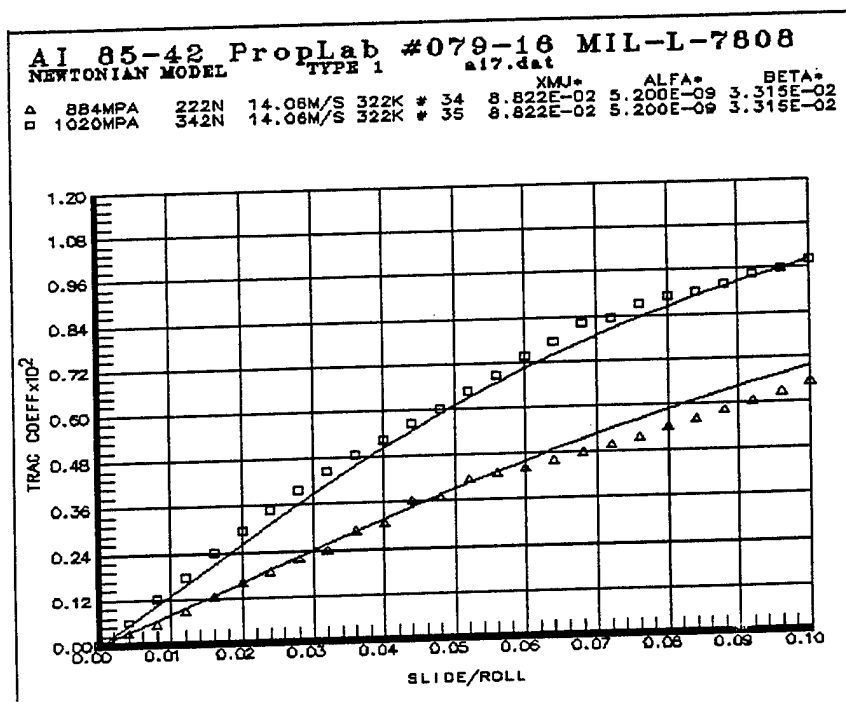


Figure 2.
Typical traction data correlation for the MIL-L-7808 lubricant.

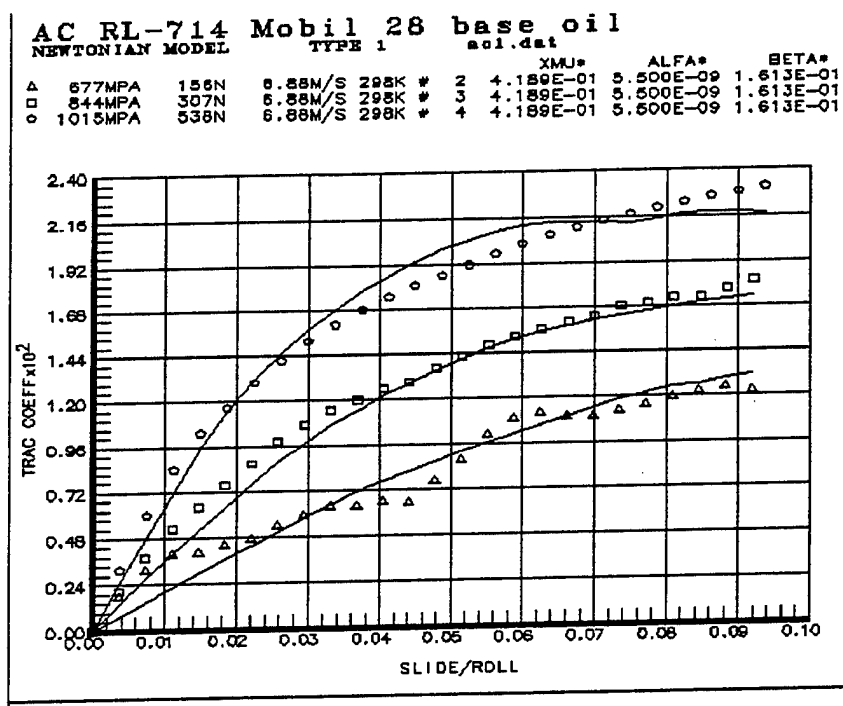


Figure 3.
Typical traction data correlations of the Mobil 28 base oil.

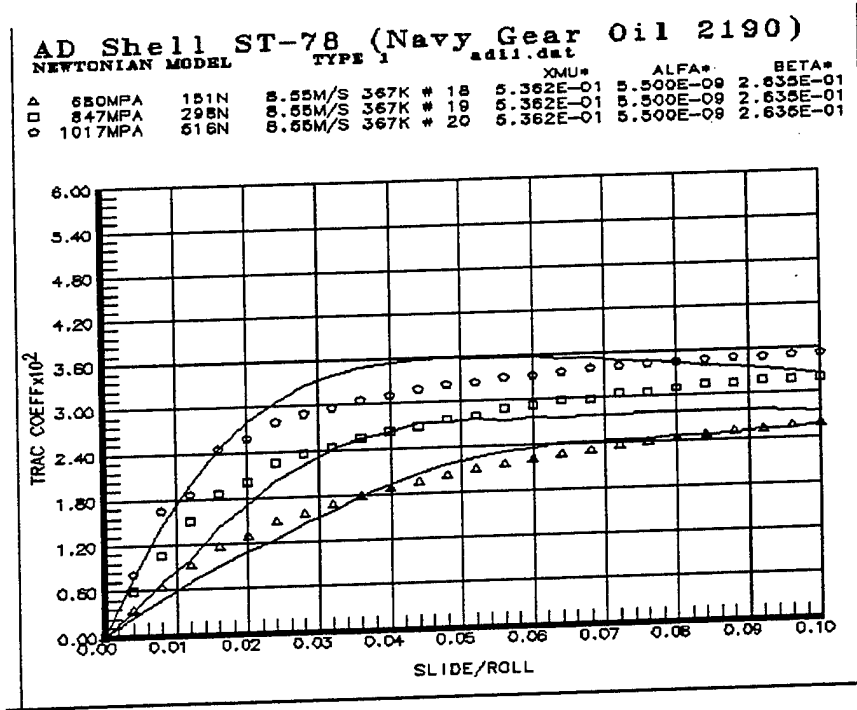


Figure 4.
Traction data correlations for the Shell ST-78 gear oil.

BB 89-105 Coray 100 new
 NEWTONIAN MODEL TYPE 1 bbi.dat

| | | | | | XMU* | ALFA* | BETA* |
|---|---------|------|---------|-----------|-----------|-----------|-----------|
| △ | 665MPa | 102N | 5.08M/S | 297K # 16 | 2.141E+00 | 7.500E-09 | 1.496E-01 |
| □ | 846MPa | 196N | 5.08M/S | 297K # 17 | 2.141E+00 | 7.500E-09 | 1.496E-01 |
| ○ | 1012MPa | 334N | 5.08M/S | 297K # 18 | 2.141E+00 | 7.500E-09 | 1.496E-01 |

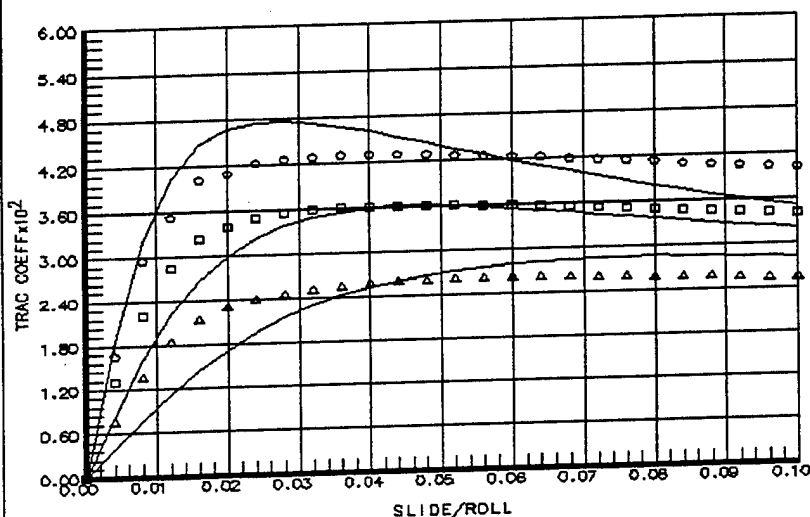


Figure 5a.
 Typical traction behavior of the Coray 100 lubricant.

BC 89-126 Coray 100 used
 NEWTONIAN MODEL TYPE 1 bol.dat

| | | | | | XMU* | ALFA* | BETA* |
|---|---------|------|---------|-----------|-----------|-----------|-----------|
| △ | 660MPa | 102N | 5.08M/S | 297K # 16 | 3.131E+00 | 7.500E-09 | 1.680E-01 |
| □ | 842MPa | 196N | 5.08M/S | 297K # 17 | 3.131E+00 | 7.500E-09 | 1.680E-01 |
| ○ | 1002MPa | 334N | 5.08M/S | 297K # 18 | 3.131E+00 | 7.500E-09 | 1.680E-01 |

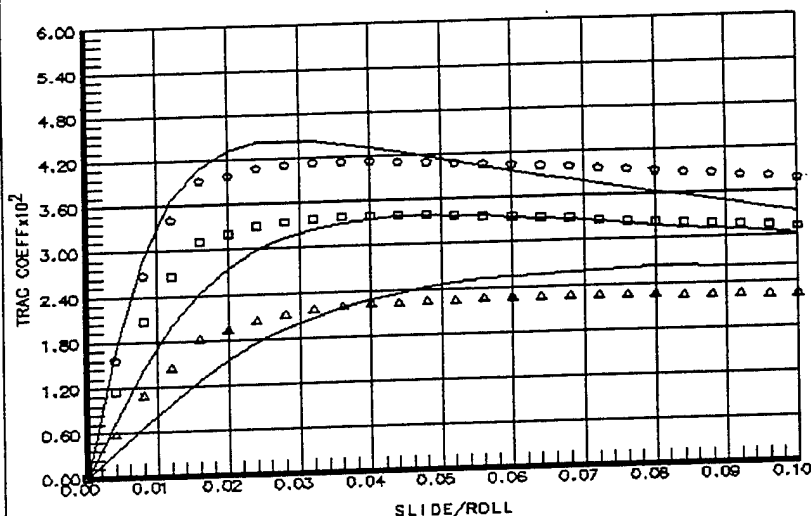


Figure 5b.
 Typical traction data correlations for the Coray 100 used oil.

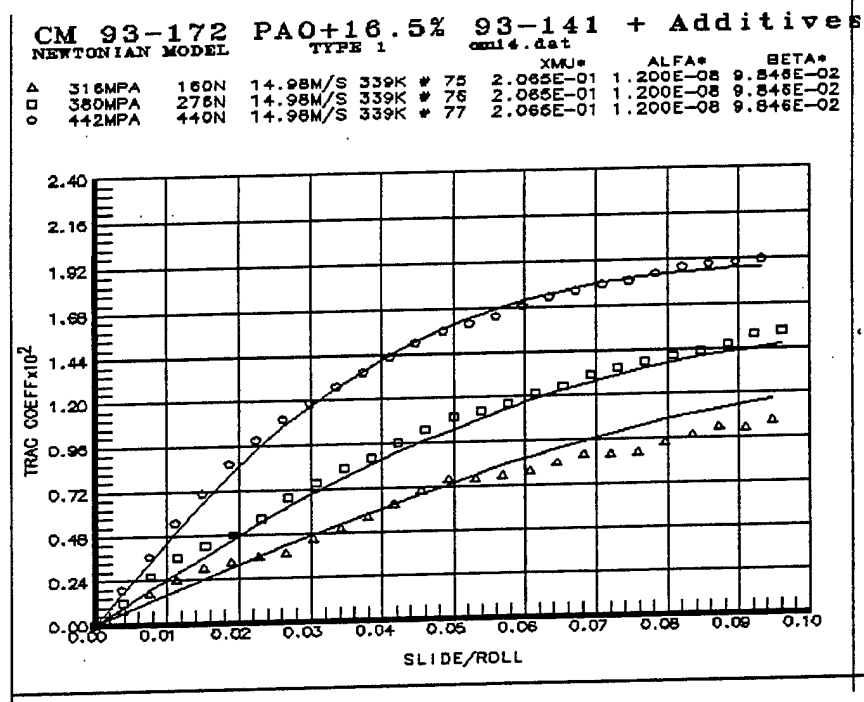


Figure 6.
 Traction data correlation for the PAO lubricant with additives.

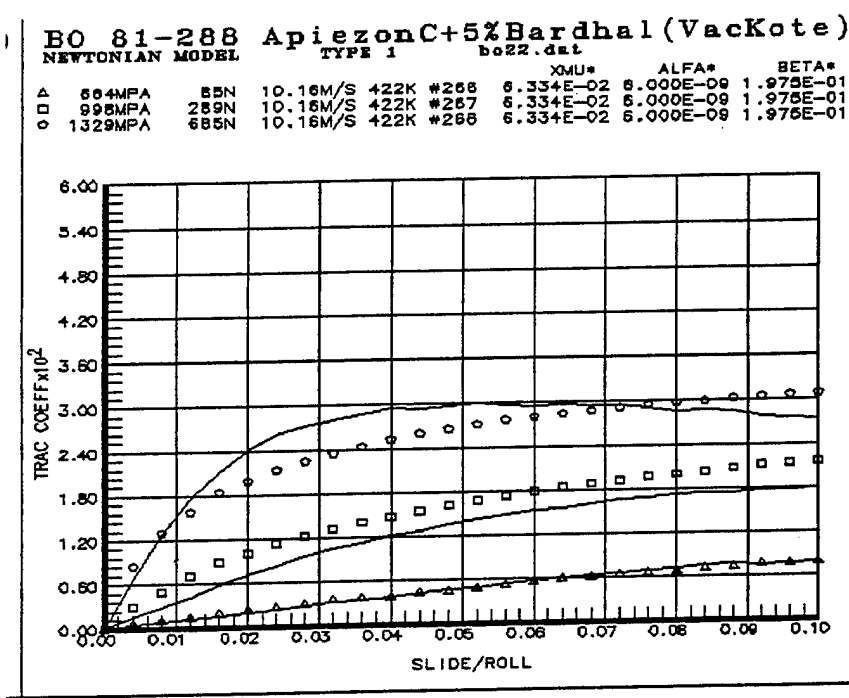


Figure 7a.

Typical behavior of VacKote lubricant under contact ellipticity ratio of 4.686

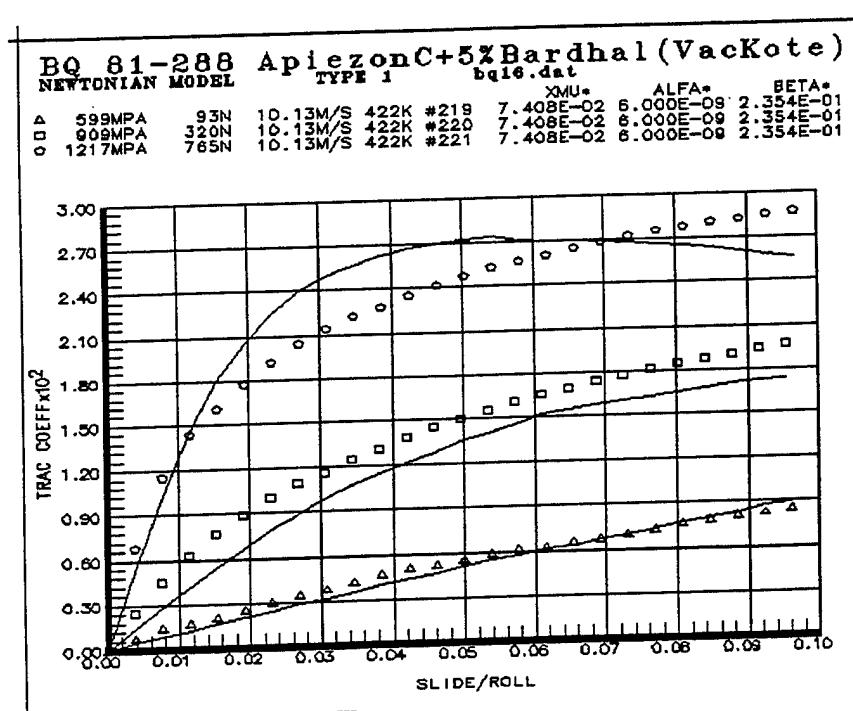


Figure 7b.

Behavior of VacKote lubricant under contact ellipticity ratio of 6.620.

Table 1: Test Lubricants and Disk Specimen Geometry

| Test Case # | Test Codes | Similar Commercial Product | Disk Geometry | | | |
|-------------|------------|--------------------------------|---------------------|-------------------|----------|---------------------------|
| | | | Rolling Radius (mm) | Crown Radius (mm) | | Contact Ellipticity Ratio |
| | | | | Disk 1 | Disk 2 | |
| A | AI 85-42 | MIL-L-7808 | 19.050 | 248.67 | 248.67 | 5.267 |
| B | AC RL-714 | Mobil 28 Base Oil | 13.653 | 891.54 | 1115.06 | 15.061 |
| C | AD ST-78 | Shell ST-78 Gear Oil | 13.653 | 922.02 | 939.80 | 14.514 |
| D | BB 89-105 | Coray 100 New Lubricant | 19.050 | 266.70 | 205.74 | 5.097 |
| E | BC 89-105 | Coray 100 Used Lubricant | 19.050 | 241.300 | 251.46 | 5.286 |
| F | CM 93-172 | PAO + 16.5% 93-141 + Additives | 18.415 | no crown | no crown | infinite |
| G | AJ 84-473 | PAO + 5% Bardahl | 13.653 | 972.06 | 957.58 | 14.825 |
| H | BO 81-288 | ApiezonC + 5%Bardahl (VacKote) | 19.050 | 203.20 | 203.20 | 4.686 |
| I | BQ 81-288 | ApiezonC + 5%Bardahl (VacKote) | 19.050 | 381.00 | 330.20 | 6.620 |
| J | CO 90-715 | Hatcol 3110 | 18.987 | 17.780 | 17.272 | 4.461 |
| K | CP 90-715 | Hatcol 3110 | 18.733 | 228.60 | 172.72 | 1.055 |
| L | BP 91-119 | Pennzane | 19.050 | 381.00 | 330.20 | 6.620 |
| M | CC 89-180 | VistaLube 7 | 19.050 | 25.400 | 27.940 | 1.249 |

Table 2: Viscosity-Pressure-Temperature Relations
Reference Temperature $T_0 = 300$ °K

| Test Case | μ_o (Pa.S) | α (1/GPa) | β (K) $\times 10^{-3}$ | γ (K/MPa) | Thermal Conductivity (N/S/K) |
|------------------------------------|-------------------|---------------------|---------------------------------|---------------------|------------------------------------|
| A: MIL-L-7808 | 0.1102 | 8.4762 | 2932 | 5.9939 | 0.0966 |
| B: Mobil 28 Base Oil | 0.0395 | 13.14 | 3428 | | 0.132 |
| C: Shell ST-78 Gear Oil | 0.135 | 15.95 | 4598 | | 0.132 |
| D: Coray 100 New Oil | 0.161 | 10.36 | 4880 | | 0.1385 |
| E: Coray 100 Used Oil | 0.161 | 10.36 | 4880 | | 0.1385 |
| F: PAO + 16.5% 93-141 + Additives | 0.214 | 29.0 | 4828 | | 0.172 |
| G: PAO + 5% Bardahl | 0.214 | 29.0 | 4828 | | 0.172 |
| H: ApiezonC + 5% Bardahl (VacKote) | 0.16232 | 20.217 | 3799 | 12.428 | 0.138 |
| I: ApiezonC + 5% Bardahl (VacKote) | 0.16232 | 20.217 | 3799 | 12.428 | 0.138 |
| J: Hatcol 3110 | 0.03449 | 9.3260 | 2825 | 3.9378 | 0.120 |
| K: Hatcol 3110 | 0.03449 | 9.3260 | 2825 | 3.9378 | 0.120 |
| L: Pennzane | | | | | |
| M: VistaLube 7 | | | | | |

Table 3: Traction Parameters for Lubricant A: MIL-L-7808

$$\tilde{\alpha} = 5.20 \text{ (1/GPa)}$$

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 299 | 5.23 | 0.565 | 0.0677 |
| | 9.73 | 0.363 | 0.0441 |
| | 14.1 | 0.243 | 0.0422 |
| | 21.1 | 0.152 | 0.0402 |
| 322 | 5.23 | 0.181 | 0.0620 |
| | 9.73 | 0.129 | 0.0442 |
| | 14.1 | 0.0882 | 0.0331 |
| | 21.1 | 0.0647 | 0.0301 |
| 344 | 5.23 | 0.0770 | 0.0415 |
| | 9.73 | 0.0555 | 0.0436 |
| | 14.1 | 0.0433 | 0.0293 |
| | 21.1 | 0.0402 | 0.0367 |
| 367 | 5.23 | 0.0500 | 0.197 |
| | 9.73 | 0.0265 | 0.0332 |
| | 14.1 | 0.0213 | 0.0353 |
| | 21.1 | 0.0215 | 0.0532 |
| 389 | 5.23 | 0.0481 | 0.416 |
| | 9.73 | 0.0156 | 0.0592 |
| | 14.1 | 0.0113 | 0.0165 |
| | 21.1 | 0.0132 | 0.0736 |

Table 4: Traction Parameters for Lubricant B: Mobil 28 Base Oil

$$\tilde{\alpha} = 5.50 \text{ (1/GPa)}$$

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 298 | 6.88 | 0.419 | 0.161 |
| | 8.53 | 0.385 | 0.128 |
| | 10.3 | 0.368 | 0.117 |
| 313 | 6.88 | 0.323 | 0.205 |
| | 8.53 | 0.283 | 0.159 |
| | 10.3 | 0.261 | 0.134 |
| 328 | 6.88 | 0.174 | 0.306 |
| | 8.53 | 0.147 | 0.211 |
| | 10.3 | 0.130 | 0.172 |
| 366 | 10.3 | 0.0586 | 0.371 |

Table 5: Traction Parameters for Lubricant C: Shell ST-78 Gear Oil
 $\tilde{\alpha} = 5.50 \text{ (1/GPa)}$

| $T_o \text{ (K)}$ | $U \text{ (M/S)}$ | $\tilde{\mu}_o \text{ (Pa.S)}$ | $\tilde{\beta} \text{ (1/K)}$ |
|-------------------|-------------------|--------------------------------|-------------------------------|
| 298 | 6.89 | 6.067 | 0.0896 |
| | 8.55 | 4.657 | 0.0771 |
| | 10.3 | 3.753 | 0.0684 |
| 313 | 6.89 | 4.714 | 0.124 |
| | 8.55 | 3.770 | 0.103 |
| | 10.3 | 3.015 | 0.0885 |
| 328 | 6.89 | 3.454 | 0.162 |
| | 8.55 | 2.509 | 0.126 |
| | 10.3 | 2.227 | 0.111 |
| 367 | 8.55 | 0.536 | 0.263 |
| | 10.3 | 0.582 | 0.213 |

Table 6: Traction Parameters for Lubricant D: Coray 100 New Lubricant
 $\tilde{\alpha} = 7.50 \text{ (1/GPa)}$

| $T_o \text{ (K)}$ | $U \text{ (M/S)}$ | $\tilde{\mu}_o \text{ (Pa.S)}$ | $\tilde{\beta} \text{ (1/K)}$ |
|-------------------|-------------------|--------------------------------|-------------------------------|
| 297 | 5.08 | 2.141 | 0.149 |
| | 7.62 | 2.009 | 0.118 |
| | 10.2 | 1.057 | 0.0922 |
| 311 | 5.08 | 2.742 | 0.224 |
| | 7.62 | 1.720 | 0.150 |
| | 10.2 | 1.211 | 0.116 |
| 322 | 5.08 | 2.277 | 0.283 |
| | 7.62 | 0.925 | 0.180 |
| | 10.2 | 0.782 | 0.139 |
| 356 | 5.08 | 0.402 | 0.632 |
| | 7.62 | 0.369 | 0.352 |
| | 10.2 | 0.287 | 0.237 |

Table 7: Traction Parameters for Lubricant E: Coray 100 Used Oil

$$\tilde{\alpha} = 7.50 \text{ (1/GPa)}$$

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 297 | 5.08 | 3.131 | 0.168 |
| | 7.62 | 1.840 | 0.124 |
| | 10.1 | 0.861 | 0.0966 |
| 311 | 5.08 | 2.611 | 0.239 |
| | 7.62 | 0.956 | 0.153 |
| | 10.1 | 0.694 | 0.116 |
| 322 | 5.08 | 2.654 | 0.324 |
| | 7.62 | 1.260 | 0.199 |
| | 10.1 | 0.888 | 0.150 |

Table 8: Traction Parameters for Lubricant F: PAO + 16.5% 93-141 + Additives
 $\tilde{\alpha} = 12.0 \text{ (1/GPa)}$

| $T_o \text{ (K)}$ | $U \text{ (M/S)}$ | $\tilde{\mu}_o \text{ (Pa.S)}$ | $\tilde{\beta} \text{ (1/K)}$ |
|-------------------|-------------------|--------------------------------|-------------------------------|
| 300 | 2.47 | 2.281 | 0.246 |
| | 5.02 | 1.978 | 0.127 |
| | 9.96 | 1.373 | 0.0835 |
| | 15.0 | 1.044 | 0.0672 |
| | 20.0 | 1.069 | 0.0733 |
| 311 | 2.47 | 1.546 | 0.338 |
| | 5.02 | 1.240 | 0.159 |
| | 9.96 | 0.835 | 0.0903 |
| | 15.0 | 0.715 | 0.0756 |
| | 20.0 | 0.822 | 0.0863 |
| 339 | 5.02 | 0.329 | 0.295 |
| | 9.96 | 0.213 | 0.124 |
| | 15.0 | 0.206 | 0.0985 |
| | 20.0 | 0.303 | 0.133 |
| 367 | 5.02 | 0.0765 | 0.306 |
| | 9.96 | 0.0595 | 0.172 |
| | 15.0 | 0.0599 | 0.137 |
| | 20.0 | 0.0845 | 0.174 |
| 394 | 15.0 | 0.0198 | 0.165 |
| | 20.0 | 0.032 | 0.234 |

Table 9: Traction Parameters for Lubricant H: Apiezon C + 5% Bardahl (VacKote)

$\tilde{\alpha} = 6.00$ (1/GPa) Contact Ellipticity = 4.686

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 300 | 5.08 | 4.126 | 0.0896 |
| | 10.2 | 1.696 | 0.0431 |
| | 15.2 | 1.452 | 0.0348 |
| | 20.3 | 1.782 | 0.0381 |
| 311 | 5.08 | 3.348 | 0.113 |
| | 10.2 | 2.087 | 0.0513 |
| | 15.2 | 1.790 | 0.0472 |
| | 20.3 | 1.346 | 0.0368 |
| 339 | 5.08 | 1.326 | 0.165 |
| | 10.2 | 0.873 | 0.0673 |
| | 15.2 | 0.743 | 0.0490 |
| | 20.3 | 0.826 | 0.0431 |
| 367 | 5.08 | 0.508 | 0.260 |
| | 10.2 | 0.364 | 0.0985 |
| | 15.2 | 0.372 | 0.0684 |
| | 20.3 | 0.452 | 0.0612 |
| 394 | 5.08 | 0.206 | 0.316 |
| | 10.2 | 0.181 | 0.153 |
| | 15.2 | 0.190 | 0.0875 |
| | 20.3 | 0.345 | 0.0947 |
| 422 | 5.08 | 0.0898 | 0.495 |
| | 10.2 | 0.0633 | 0.197 |
| | 15.2 | 0.0653 | 0.124 |
| | 20.3 | 0.0899 | 0.102 |

Table 10: Traction Parameters for Lubricant I: Apiezon C + 5% Bardahl (VacKote)

$\tilde{\alpha} = 6.00$ (1/GPa) Contact Ellipticity = 6.620

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 300 | 10.1 | 2.233 | 0.0459 |
| | 15.2 | 1.345 | 0.0394 |
| | 20.3 | 1.676 | 0.0424 |
| 311 | 10.1 | 1.831 | 0.0513 |
| | 15.2 | 1.532 | 0.0425 |
| | 20.3 | 1.608 | 0.0478 |
| 339 | 10.1 | 1.169 | 0.0717 |
| | 15.2 | 0.992 | 0.0584 |
| | 20.3 | 1.216 | 0.0564 |
| 367 | 10.1 | 0.540 | 0.113 |
| | 15.2 | 0.487 | 0.0712 |
| | 20.3 | 0.631 | 0.0724 |
| 394 | 10.1 | 0.207 | 0.155 |
| | 15.2 | 0.200 | 0.106 |
| | 20.3 | 0.304 | 0.104 |
| 422 | 10.1 | 0.0741 | 0.235 |
| | 15.2 | 0.0810 | 0.155 |

Table 11: Traction Parameters for Lubricant J: Hatcol 3110 $\tilde{\alpha} = 2.00$ (1/GPa) Contact Ellipticity = 1.055

| T_o (K) | U (M/S) | $\tilde{\mu}_o$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|------------------------|-----------------------|
| 300 | 2.51 | 30.50 | 0.371 |
| | 5.10 | 35.33 | 0.263 |
| | 10.1 | 14.17 | 0.0710 |
| | 15.2 | 14.03 | 0.0558 |
| | 20.3 | 18.95 | 0.0500 |
| 311 | 10.1 | 10.75 | 0.0884 |
| | 15.2 | 9.808 | 0.0564 |
| | 20.3 | 13.67 | 0.0524 |
| 339 | 15.2 | 4.550 | 0.0770 |
| | 20.3 | 7.872 | 0.0702 |
| 367 | 15.2 | 3.746 | 0.214 |
| | 20.3 | 3.509 | 0.0870 |
| 394 | 15.2 | 1.173 | 0.134 |
| 422 | 15.2 | 0.898 | 0.227 |
| | 20.3 | 1.206 | 0.186 |

Table 12: Traction Parameters for Lubricant K: Hatcol 3110 $\tilde{\alpha} = 5.00$ (1/GPa) Contact Ellipticity = 4.641

| T_o (K) | U (M/S) | $\tilde{\mu}$ (Pa.S) | $\tilde{\beta}$ (1/K) |
|-----------|-----------|----------------------|-----------------------|
| 300 | 2.51 | 0.920 | 0.435 |
| | 5.11 | 0.675 | 0.137 |
| | 10.1 | 0.453 | 0.0661 |
| | 15.2 | 0.447 | 0.0562 |
| | 20.3 | 0.592 | 0.0667 |
| 311 | 2.51 | 0.588 | 0.519 |
| | 5.11 | 0.451 | 0.144 |
| | 10.1 | 0.289 | 0.0676 |
| | 15.2 | 0.322 | 0.0701 |
| | 20.3 | 0.418 | 0.0734 |
| 339 | 5.11 | 0.113 | 0.169 |
| | 10.1 | 0.0910 | 0.0944 |
| | 15.2 | 0.0921 | 0.0765 |
| | 20.3 | 0.141 | 0.103 |
| 367 | 5.11 | 0.0462 | 0.0330 |
| | 10.1 | 0.0340 | 0.129 |
| | 15.2 | 0.0350 | 0.0999 |
| | 20.3 | 0.0577 | 0.168 |
| 394 | 10.1 | 0.0120 | 0.241 |
| | 15.2 | 0.0145 | 0.202 |
| | 20.3 | 0.0162 | 0.172 |
| 422 | 10.1 | 0.00563 | 0.234 |
| | 15.2 | 0.00541 | 0.298 |
| | 20.3 | 0.00575 | 0.188 |

2. Traction Data Set A: 85-42 MIL-L-7808

Data set name: AI 85-42 Proplab #079-16 MIL-L-7808
 Rolling radii [Disks 1 & 2] (in): 0.75 0.75
 Crown radii [Disks 1 & 2] (in): 9.79 9.49

Number of data sets found = 100

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Points | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|--------|----------------|
| 1 | 79.00 | 8.45 | 2284.00 | 2956.00 | 2620.00 | 49 | o77079 #1 |
| 2 | 79.00 | 11.29 | 2284.00 | 2956.00 | 2620.00 | 49 | o77079 #2 |
| 3 | 79.00 | 22.65 | 2284.00 | 2956.00 | 2620.00 | 49 | o77079 #3 |
| 4 | 79.00 | 49.63 | 2284.00 | 2956.00 | 2620.00 | 49 | o77079 #4 |
| 5 | 79.00 | 77.32 | 2284.00 | 2956.00 | 2620.00 | 49 | o77079 #5 |
| 6 | 79.00 | 8.45 | 4256.00 | 5504.00 | 4880.00 | 49 | o77079 #6 |
| 7 | 79.00 | 11.29 | 4256.00 | 5504.00 | 4880.00 | 49 | o77079 #7 |
| 8 | 79.00 | 22.65 | 4256.00 | 5504.00 | 4880.00 | 49 | o77079 #8 |
| 9 | 79.00 | 49.63 | 4256.00 | 5504.00 | 4880.00 | 49 | o77079 #9 |
| 10 | 79.00 | 77.32 | 4256.00 | 5504.00 | 4880.00 | 49 | o77079 #10 |
| 11 | 79.00 | 8.45 | 6162.00 | 7938.00 | 7050.00 | 49 | o77079 #11 |
| 12 | 79.00 | 11.29 | 6162.00 | 7938.00 | 7050.00 | 49 | o77079 #12 |
| 13 | 79.00 | 22.65 | 6162.00 | 7938.00 | 7050.00 | 49 | o77079 #13 |
| 14 | 79.00 | 49.63 | 6162.00 | 7938.00 | 7050.00 | 49 | o77079 #14 |
| 15 | 79.00 | 77.32 | 6162.00 | 7938.00 | 7050.00 | 49 | o77079 #15 |
| 16 | 79.00 | 8.45 | 9280.00 | 11920.00 | 10600.00 | 49 | o77079 #16 |
| 17 | 79.00 | 11.29 | 9280.00 | 11920.00 | 10600.00 | 49 | o77079 #17 |
| 18 | 79.00 | 22.65 | 9280.00 | 11920.00 | 10600.00 | 49 | o77079 #18 |
| 19 | 79.00 | 49.63 | 9280.00 | 11920.00 | 10600.00 | 49 | o77079 #19 |
| 20 | 79.00 | 77.32 | 9280.00 | 11920.00 | 10600.00 | 49 | o77079 #20 |
| 21 | 120.00 | 8.45 | 2284.00 | 2956.00 | 2620.00 | 49 | o77120 #1 |
| 22 | 120.00 | 11.29 | 2284.00 | 2956.00 | 2620.00 | 49 | o77120 #2 |
| 23 | 120.00 | 22.65 | 2284.00 | 2956.00 | 2620.00 | 49 | o77120 #3 |
| 24 | 120.00 | 49.63 | 2284.00 | 2956.00 | 2620.00 | 49 | o77120 #4 |
| 25 | 120.00 | 77.32 | 2284.00 | 2956.00 | 2620.00 | 49 | o77120 #5 |
| 26 | 120.00 | 8.45 | 4256.00 | 5504.00 | 4880.00 | 49 | o77120 #6 |
| 27 | 120.00 | 11.29 | 4256.00 | 5504.00 | 4880.00 | 49 | o77120 #7 |
| 28 | 120.00 | 22.65 | 4256.00 | 5504.00 | 4880.00 | 49 | o77120 #8 |
| 29 | 120.00 | 49.63 | 4256.00 | 5504.00 | 4880.00 | 49 | o77120 #9 |
| 30 | 120.00 | 77.32 | 4256.00 | 5504.00 | 4880.00 | 49 | o77120 #10 |
| 31 | 120.00 | 8.45 | 6162.00 | 7938.00 | 7050.00 | 49 | o77120 #11 |
| 32 | 120.00 | 11.29 | 6162.00 | 7938.00 | 7050.00 | 49 | o77120 #12 |
| 33 | 120.00 | 22.65 | 6162.00 | 7938.00 | 7050.00 | 49 | o77120 #13 |
| 34 | 120.00 | 49.63 | 6162.00 | 7938.00 | 7050.00 | 49 | o77120 #14 |
| 35 | 120.00 | 77.32 | 6162.00 | 7938.00 | 7050.00 | 49 | o77120 #15 |
| 36 | 120.00 | 8.45 | 9280.00 | 11920.00 | 10600.00 | 49 | o77120 #16 |
| 37 | 120.00 | 11.29 | 9280.00 | 11920.00 | 10600.00 | 49 | o77120 #17 |
| 38 | 120.00 | 22.65 | 9280.00 | 11920.00 | 10600.00 | 49 | o77120 #18 |
| 39 | 120.00 | 49.63 | 9280.00 | 11920.00 | 10600.00 | 49 | o77120 #19 |
| 40 | 120.00 | 77.32 | 9280.00 | 11920.00 | 10600.00 | 49 | o77120 #20 |
| 41 | 159.00 | 8.45 | 2284.00 | 2956.00 | 2620.00 | 49 | o77159 #1 |
| 42 | 159.00 | 11.29 | 2284.00 | 2956.00 | 2620.00 | 49 | o77159 #2 |
| 43 | 159.00 | 22.65 | 2284.00 | 2956.00 | 2620.00 | 49 | o77159 #3 |
| 44 | 159.00 | 49.63 | 2284.00 | 2956.00 | 2620.00 | 49 | o77159 #4 |
| 45 | 159.00 | 77.32 | 2284.00 | 2956.00 | 2620.00 | 49 | o77159 #5 |
| 46 | 159.00 | 8.45 | 4256.00 | 5504.00 | 4880.00 | 49 | o77159 #6 |
| 47 | 159.00 | 11.29 | 4256.00 | 5504.00 | 4880.00 | 49 | o77159 #7 |
| 48 | 159.00 | 22.65 | 4256.00 | 5504.00 | 4880.00 | 49 | o77159 #8 |
| 49 | 159.00 | 49.63 | 4256.00 | 5504.00 | 4880.00 | 49 | o77159 #9 |
| 50 | 159.00 | 77.32 | 4256.00 | 5504.00 | 4880.00 | 49 | o77159 #10 |

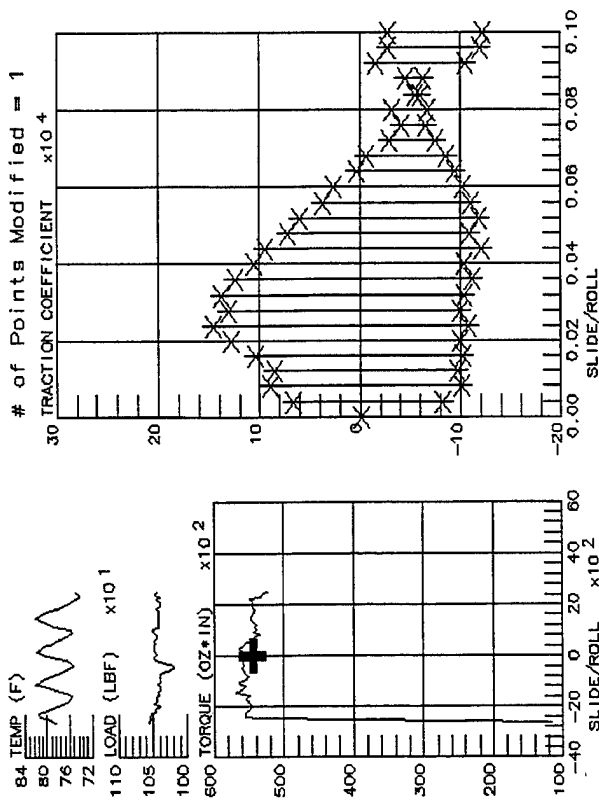
Data set: AI 85-42 ProPLab #079-16 MIL-L-7808continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Points | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|--------|----------------|
| 51 | 159.00 | 8.45 | 6162.00 | 7938.00 | 7050.00 | 49 | o77159 #11 |
| 52 | 159.00 | 11.29 | 6162.00 | 7938.00 | 7050.00 | 49 | o77159 #12 |
| 53 | 159.00 | 22.65 | 6162.00 | 7938.00 | 7050.00 | 49 | o77159 #13 |
| 54 | 159.00 | 49.63 | 6162.00 | 7938.00 | 7050.00 | 49 | o77159 #14 |
| 55 | 159.00 | 77.32 | 6162.00 | 7938.00 | 7050.00 | 49 | o77159 #15 |
| 56 | 159.00 | 8.45 | 9280.00 | 11920.00 | 10600.00 | 49 | o77159 #16 |
| 57 | 159.00 | 11.29 | 9280.00 | 11920.00 | 10600.00 | 49 | o77159 #17 |
| 58 | 159.00 | 22.65 | 9280.00 | 11920.00 | 10600.00 | 49 | o77159 #18 |
| 59 | 159.00 | 49.63 | 9280.00 | 11920.00 | 10600.00 | 49 | o77159 #19 |
| 60 | 159.00 | 77.32 | 9280.00 | 11920.00 | 10600.00 | 49 | o77159 #20 |
| 61 | 200.00 | 8.45 | 2284.00 | 2956.00 | 2620.00 | 49 | o77200 #1 |
| 62 | 200.00 | 11.29 | 2284.00 | 2956.00 | 2620.00 | 49 | o77200 #2 |
| 63 | 200.00 | 22.65 | 2284.00 | 2956.00 | 2620.00 | 49 | o77200 #3 |
| 64 | 200.00 | 49.63 | 2284.00 | 2956.00 | 2620.00 | 49 | o77200 #4 |
| 65 | 200.00 | 77.32 | 2284.00 | 2956.00 | 2620.00 | 49 | o77200 #5 |
| 66 | 200.00 | 8.45 | 4256.00 | 5504.00 | 4880.00 | 49 | o77200 #6 |
| 67 | 200.00 | 11.29 | 4256.00 | 5504.00 | 4880.00 | 49 | o77200 #7 |
| 68 | 200.00 | 22.65 | 4256.00 | 5504.00 | 4880.00 | 49 | o77200 #8 |
| 69 | 200.00 | 49.63 | 4256.00 | 5504.00 | 4880.00 | 49 | o77200 #9 |
| 70 | 200.00 | 77.32 | 4256.00 | 5504.00 | 4880.00 | 49 | o77200 #10 |
| 71 | 200.00 | 8.45 | 6162.00 | 7938.00 | 7050.00 | 49 | o77200 #11 |
| 72 | 200.00 | 11.29 | 6162.00 | 7938.00 | 7050.00 | 49 | o77200 #12 |
| 73 | 200.00 | 22.65 | 6162.00 | 7938.00 | 7050.00 | 49 | o77200 #13 |
| 74 | 200.00 | 49.63 | 6162.00 | 7938.00 | 7050.00 | 49 | o77200 #14 |
| 75 | 200.00 | 77.32 | 6162.00 | 7938.00 | 7050.00 | 49 | o77200 #15 |
| 76 | 200.00 | 8.45 | 9280.00 | 11920.00 | 10600.00 | 49 | o77200 #16 |
| 77 | 200.00 | 11.29 | 9280.00 | 11920.00 | 10600.00 | 49 | o77200 #17 |
| 78 | 200.00 | 22.65 | 9280.00 | 11920.00 | 10600.00 | 49 | o77200 #18 |
| 79 | 200.00 | 49.63 | 9280.00 | 11920.00 | 10600.00 | 49 | o77200 #19 |
| 80 | 200.00 | 77.32 | 9280.00 | 11920.00 | 10600.00 | 49 | o77200 #20 |
| 81 | 240.00 | 8.45 | 2284.00 | 2956.00 | 2620.00 | 49 | o77240 #1 |
| 82 | 240.00 | 11.29 | 2284.00 | 2956.00 | 2620.00 | 49 | o77240 #2 |
| 83 | 240.00 | 22.65 | 2284.00 | 2956.00 | 2620.00 | 49 | o77240 #3 |
| 84 | 240.00 | 49.63 | 2284.00 | 2956.00 | 2620.00 | 49 | o77240 #4 |
| 85 | 240.00 | 77.32 | 2284.00 | 2956.00 | 2620.00 | 49 | o77240 #5 |
| 86 | 240.00 | 8.45 | 4256.00 | 5504.00 | 4880.00 | 49 | o77240 #6 |
| 87 | 240.00 | 11.29 | 4256.00 | 5504.00 | 4880.00 | 49 | o77240 #7 |
| 88 | 240.00 | 22.65 | 4256.00 | 5504.00 | 4880.00 | 49 | o77240 #8 |
| 89 | 240.00 | 49.63 | 4256.00 | 5504.00 | 4880.00 | 49 | o77240 #9 |
| 90 | 240.00 | 77.32 | 4256.00 | 5504.00 | 4880.00 | 49 | o77240 #10 |
| 91 | 240.00 | 8.45 | 6162.00 | 7938.00 | 7050.00 | 49 | o77240 #11 |
| 92 | 240.00 | 11.29 | 6162.00 | 7938.00 | 7050.00 | 49 | o77240 #12 |
| 93 | 240.00 | 22.65 | 6162.00 | 7938.00 | 7050.00 | 49 | o77240 #13 |
| 94 | 240.00 | 49.63 | 6162.00 | 7938.00 | 7050.00 | 49 | o77240 #14 |
| 95 | 240.00 | 77.32 | 6162.00 | 7938.00 | 7050.00 | 49 | o77240 #15 |
| 96 | 240.00 | 8.45 | 9280.00 | 11920.00 | 10600.00 | 49 | o77240 #16 |
| 97 | 240.00 | 11.29 | 9280.00 | 11920.00 | 10600.00 | 49 | o77240 #17 |
| 98 | 240.00 | 22.65 | 9280.00 | 11920.00 | 10600.00 | 49 | o77240 #18 |
| 99 | 240.00 | 49.63 | 9280.00 | 11920.00 | 10600.00 | 49 | o77240 #19 |
| 100 | 240.00 | 77.32 | 9280.00 | 11920.00 | 10600.00 | 49 | o77240 #20 |

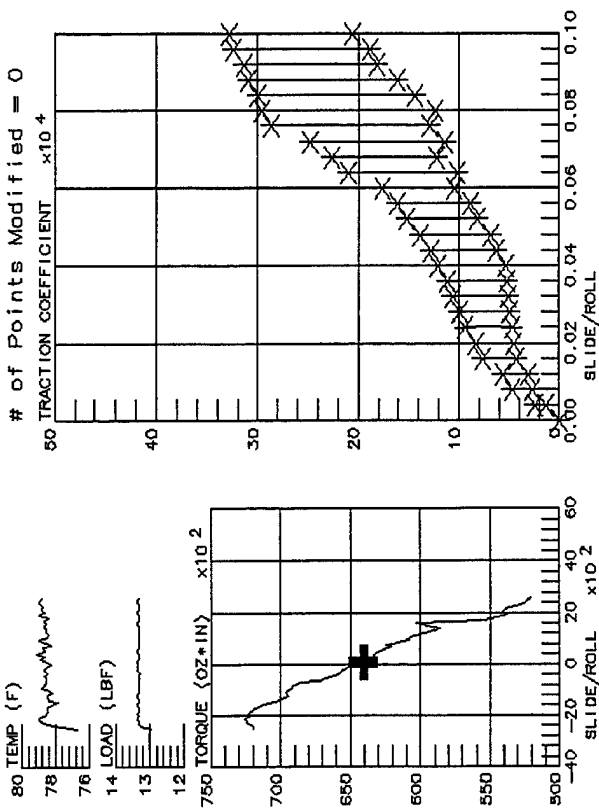
Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-------------|
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| ai2.dat | 79.00 | 4880.00 | 9 10 |
| ai3.dat | 79.00 | 7050.00 | 14 15 |
| ai4.dat | 79.00 | 10600.00 | 19 20 |
| ai5.dat | 120.00 | 2620.00 | 24 25 |
| ai6.dat | 120.00 | 4880.00 | 29 30 |
| ai7.dat | 120.00 | 7050.00 | 34 35 |
| ai8.dat | 120.00 | 10600.00 | 39 40 |
| ai9.dat | 159.00 | 2620.00 | 44 45 |
| ai10.dat | 159.00 | 4880.00 | 49 50 |
| ai11.dat | 159.00 | 7050.00 | 54 55 |
| ai12.dat | 159.00 | 10600.00 | 59 60 |
| ai13.dat | 200.00 | 2620.00 | 64 65 |
| ai14.dat | 200.00 | 4880.00 | 69 70 |
| ai15.dat | 200.00 | 7050.00 | 74 75 |
| ai16.dat | 200.00 | 10600.00 | 79 80 |
| ai17.dat | 240.00 | 2620.00 | 84 85 |
| ai18.dat | 240.00 | 4880.00 | 89 90 |
| ai19.dat | 240.00 | 7050.00 | 94 95 |
| ai20.dat | 240.00 | 10600.00 | 99 100 |

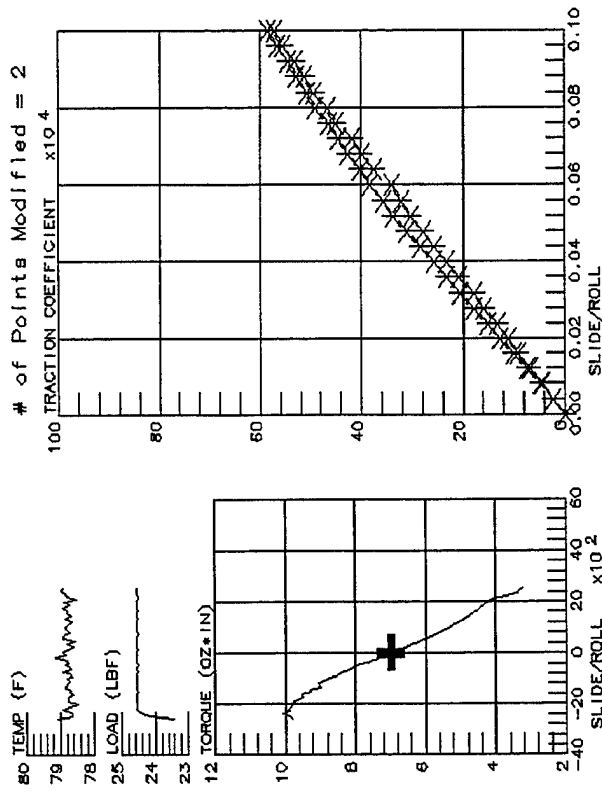
AI 85-42 Proplab #079-16 MIL-L-7808 #1
79F 8LBF 2620RPM 1 FILE: 077079



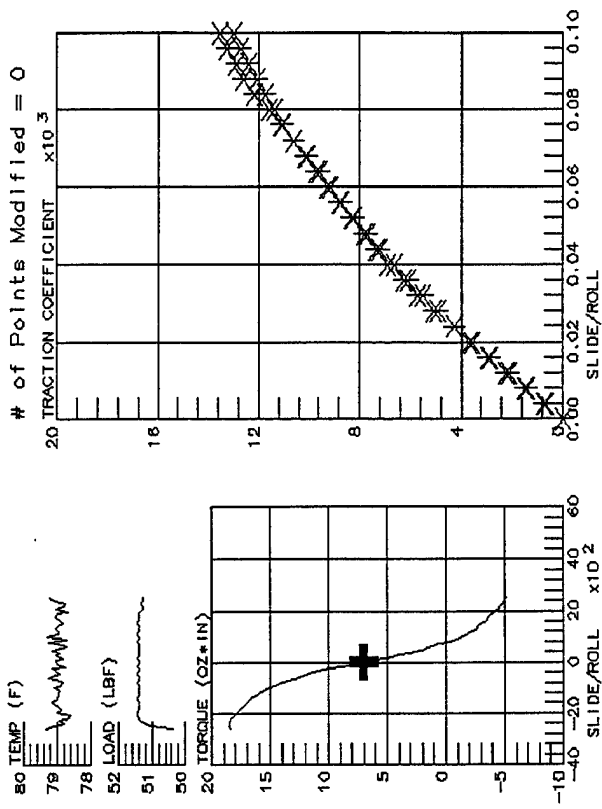
AI 85-42 Proplab #079-16 MIL-L-7808 #2
79F 11LBF 2620RPM 2 FILE: 077079



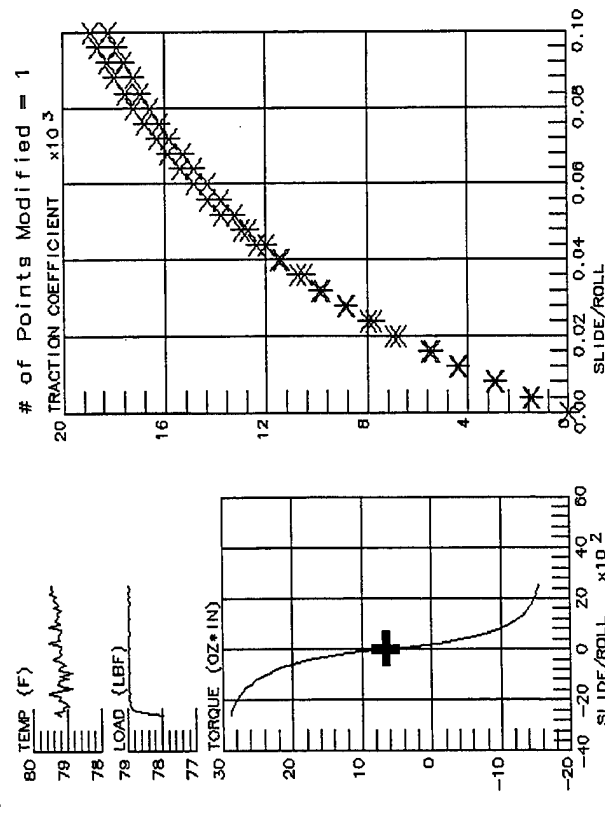
AI 85-42 Proplab #079-16 MIL-L-7808 #3
79F 23LBF 2620RPM 3 FILE: 077079



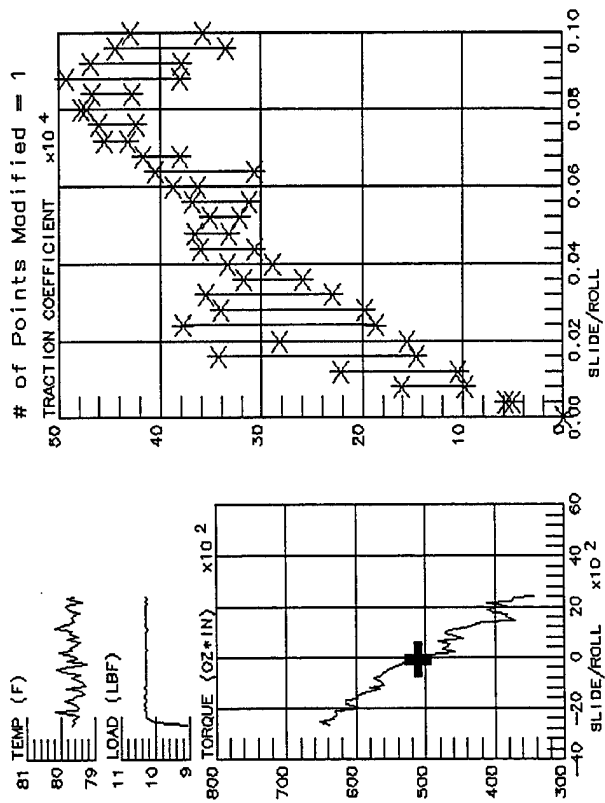
AI 85-42 Proplab #079-16 MIL-L-7808 #4
79F 50LBF 2620RPM 4 FILE: 077079



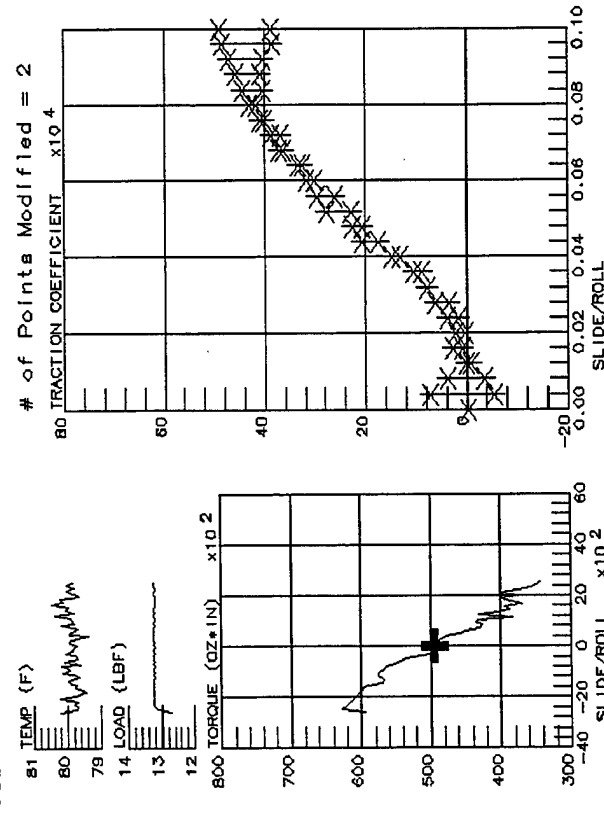
AI 85-42 PropLab #079-16 MIL-L-7808 #5
79F 77LBF 2620RPM 5 FILE: 077079



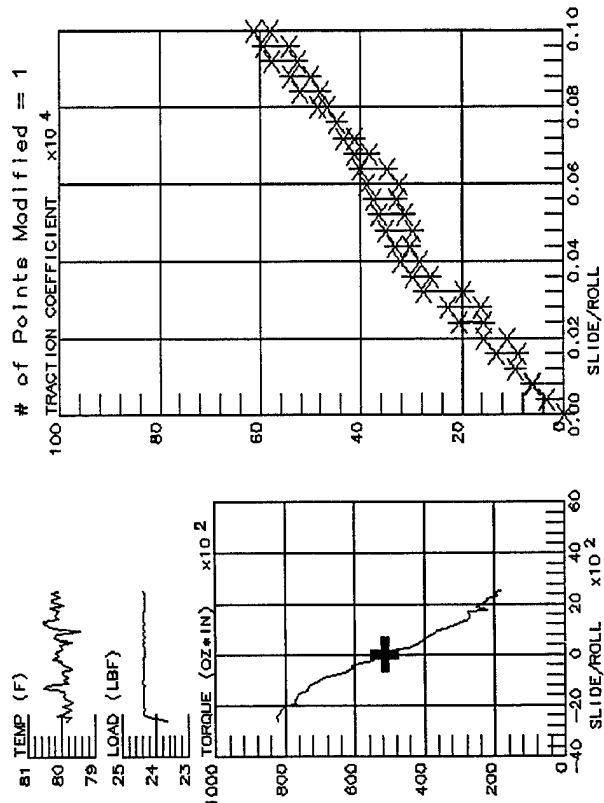
AI 85-42 PropLab #079-16 MIL-L-7808 #6
79F 8LBF 4880RPM 8 FILE: 077079



AI 85-42 PropLab #079-16 MIL-L-7808 #7
79F 11LBF 4880RPM 7 FILE: 077079



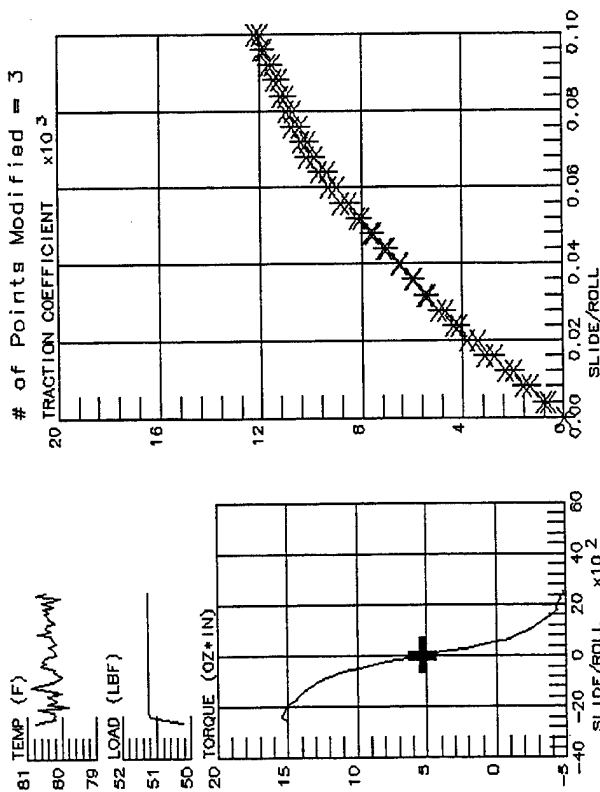
AI 85-42 PropLab #079-16 MIL-L-7808 #8
79F 23LBF 4880RPM 8 FILE: 077079



AI 85-42 Proplab #079-18 MIL-L-7808 #10
79F 77LBF 4880RPM 10 FILE: 077079

79F 50LBF 4880RPM 9 FILE: 077079

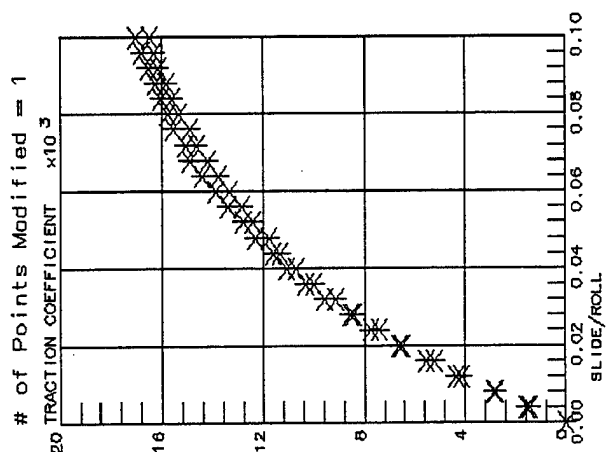
of Points Modified = 3



AI 85-42 Proplab #079-18 MIL-L-7808 #10
79F 77LBF 4880RPM 10 FILE: 077079

79F 77LBF 4880RPM 10 FILE: 077079

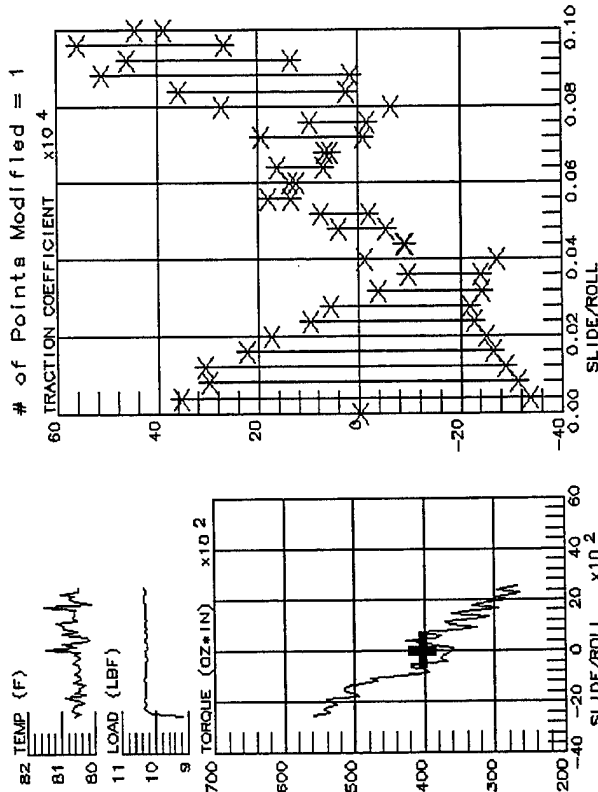
of Points Modified = 1



AI 85-42 PropLab #079-16 MIL-L-7808 #11
79F 8LBF 7050RPM 11 FILE: 077079

79F 8LBF 7050RPM 11 FILE: 077079

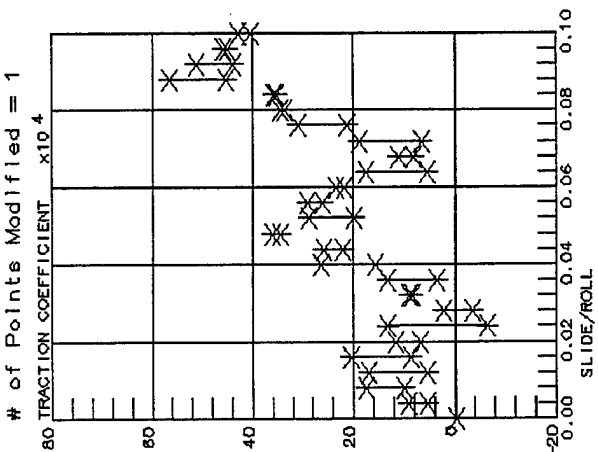
of Points Modified = 1



AI 85-42 PropLab #079-16 MIL-L-7808
79F 11LBF 7050RPM 12 FILE: 077079 #12

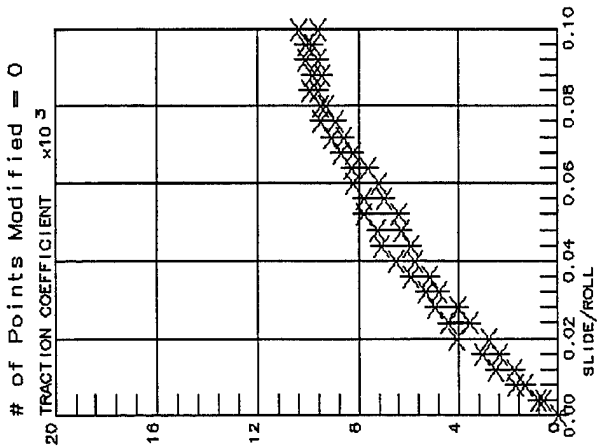
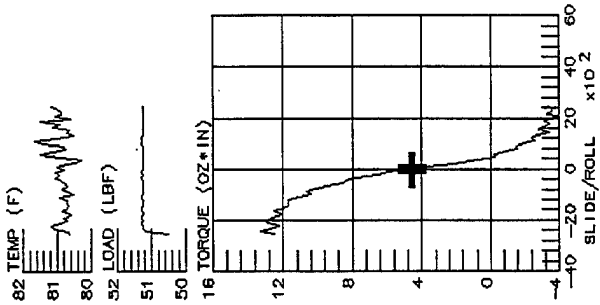
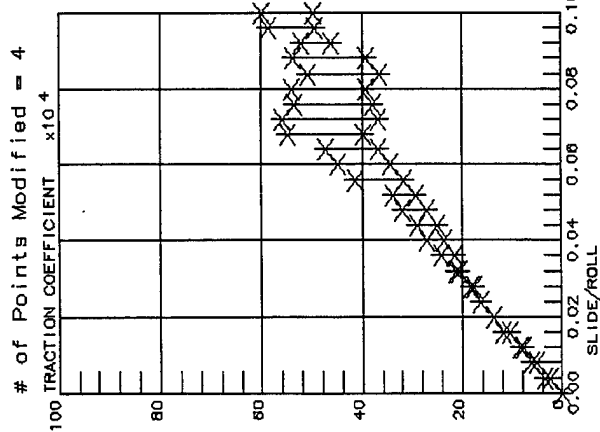
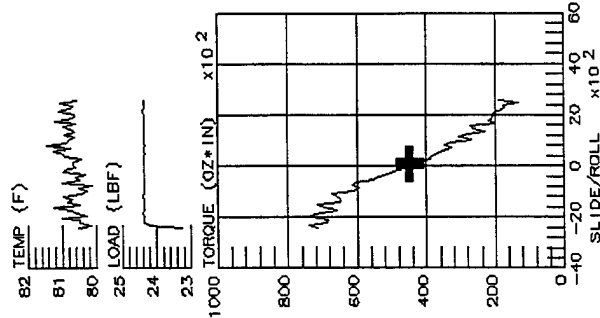
79F 11LBF 7050RPM 12 FILE: 077079

of Points Modified = 1



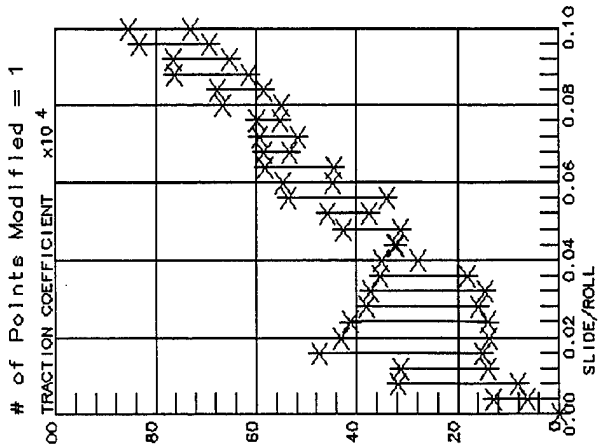
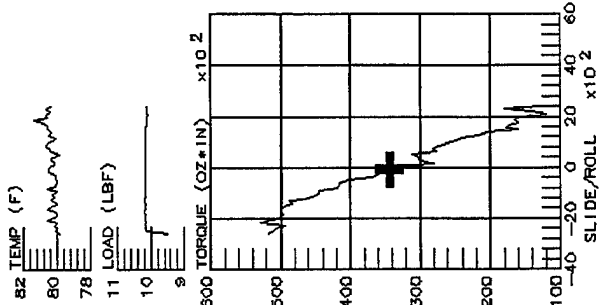
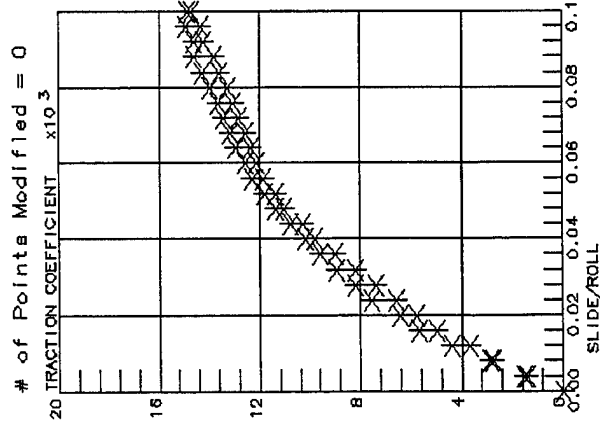
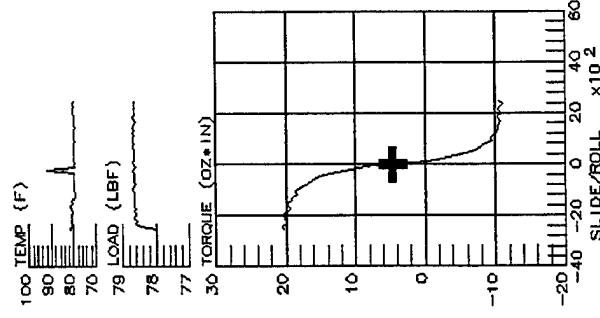
AI 85-42 Proplab #079-16 MIL-L-7808 #13
79F 23LBF 7050RPM 13 FILE: 077079

of Points Modified = 4



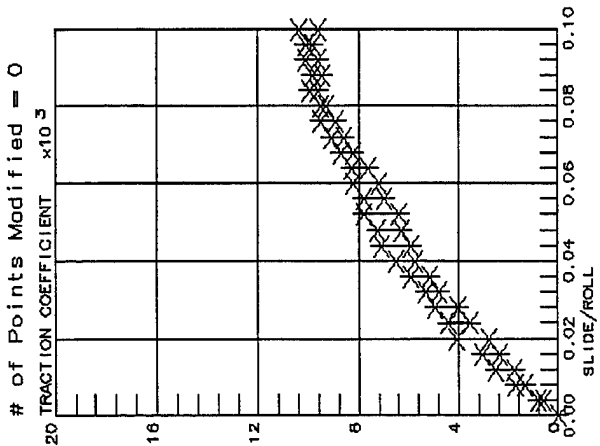
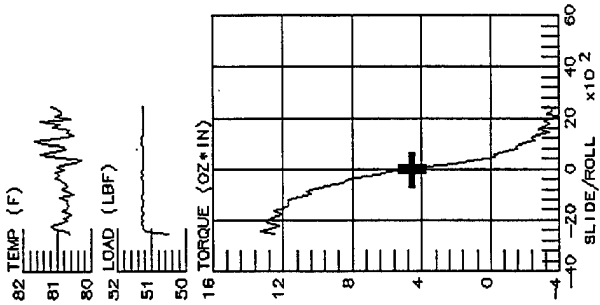
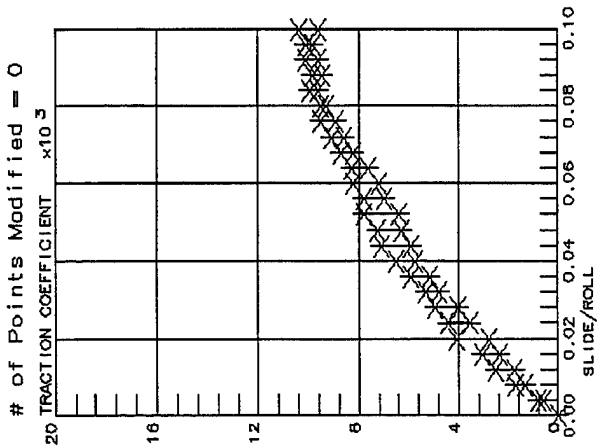
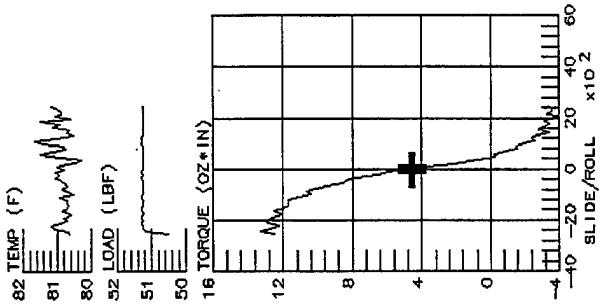
AI 85-42 Proplab #079-16 MIL-L-7808 #15
79F 77LBF 7050RPM 15 FILE: 077079

of Points Modified = 0



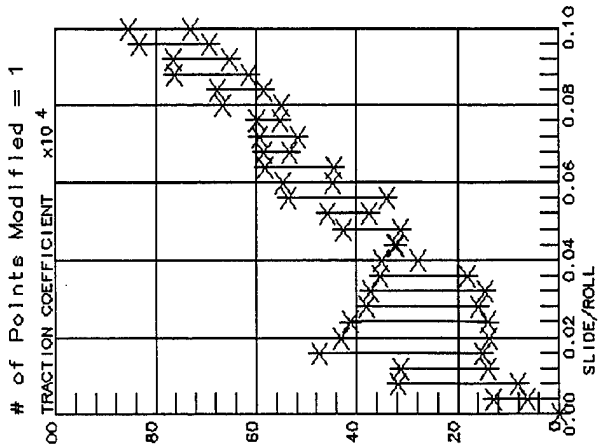
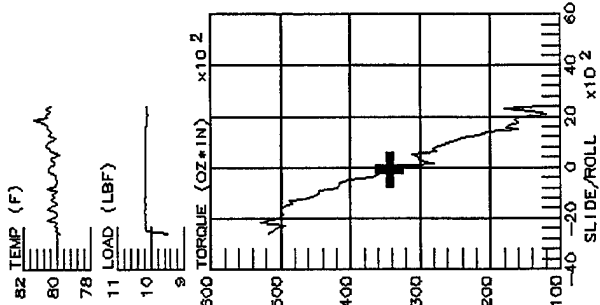
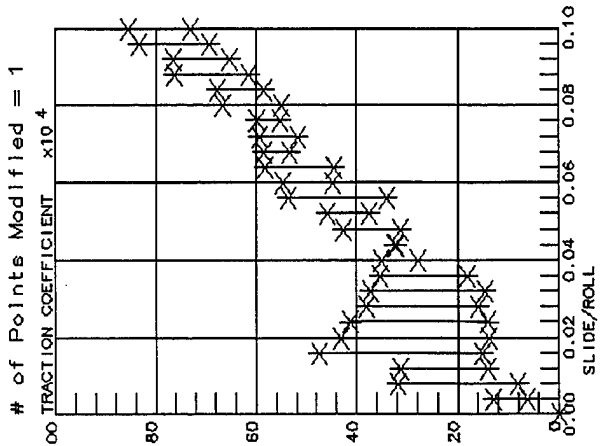
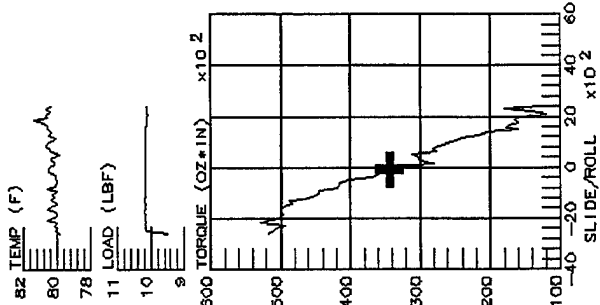
AI 85-42 Proplab #079-16 MIL-L-7808 #14
79F 50LBF 7050RPM 14 FILE: 077079

of Points Modified = 0



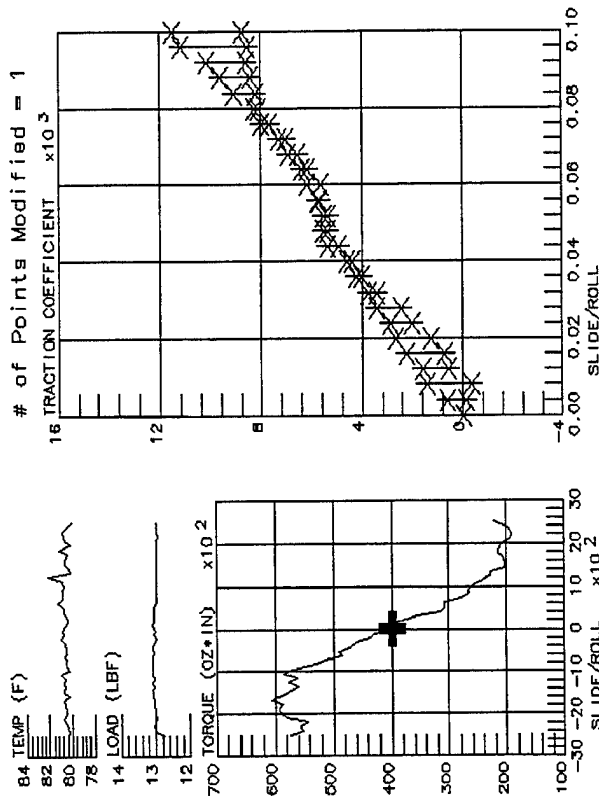
AI 85-42 Proplab #079-16 MIL-L-7808 #16
79F 8LBF 10600RPM 16 FILE: 077079

of Points Modified = 1



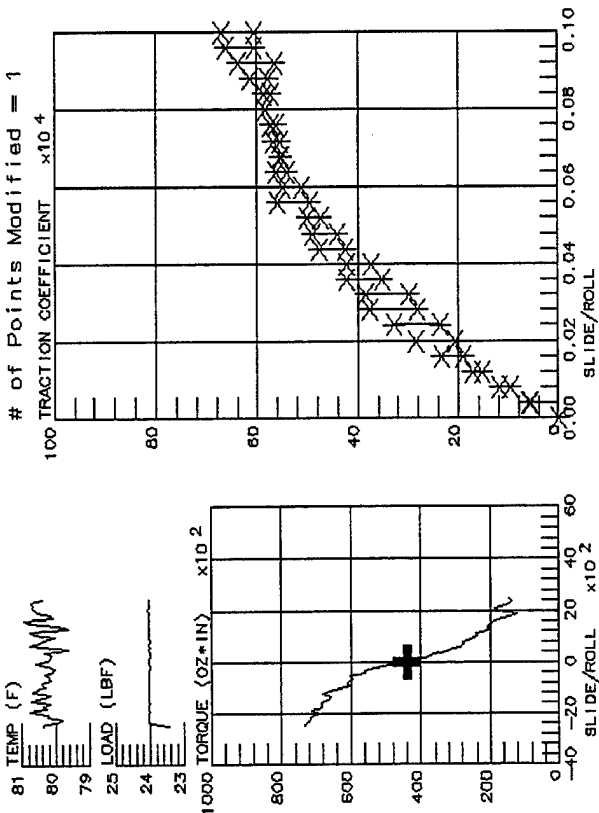
AI 85-42 Proplab #079-16 MIL-L-7808 #17
79F 111BF 10600RPM 17 FILE: 077079

of Points Modified = 1



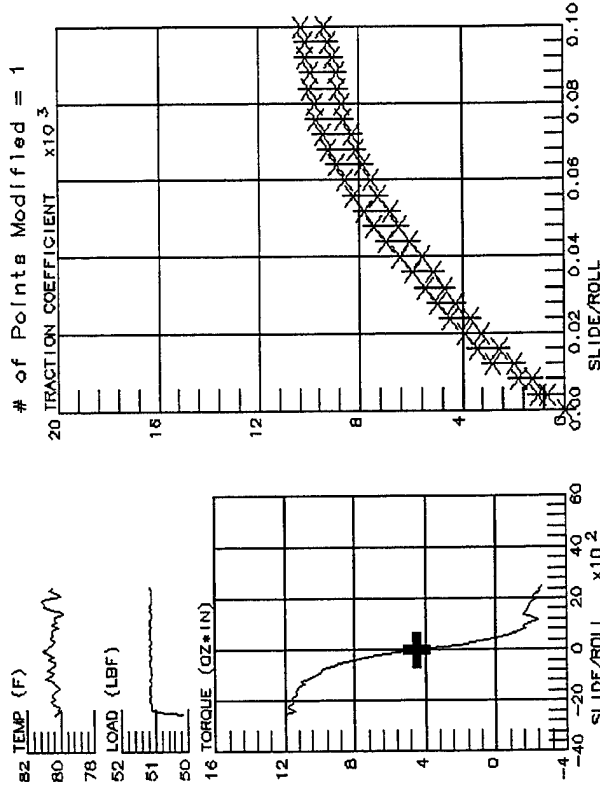
AI 85-42 Proplab #079-16 MIL-L-7808 #18
79F 23LBF 10600RPM 18 FILE: 077079

of Points Modified = 1



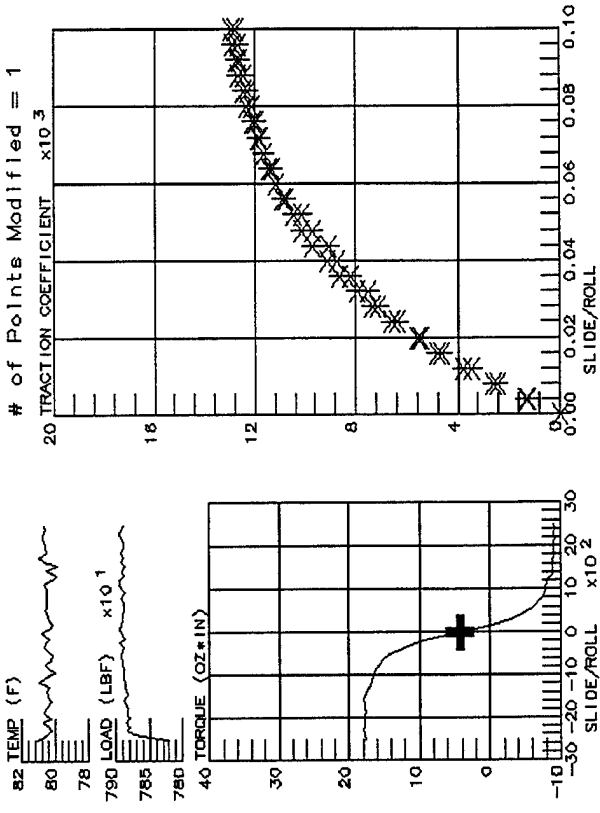
AI 85-42 Proplab #079-16 MIL-L-7808 #19
79F 50LBF 10600RPM 19 FILE: 077079

of Points Modified = 1



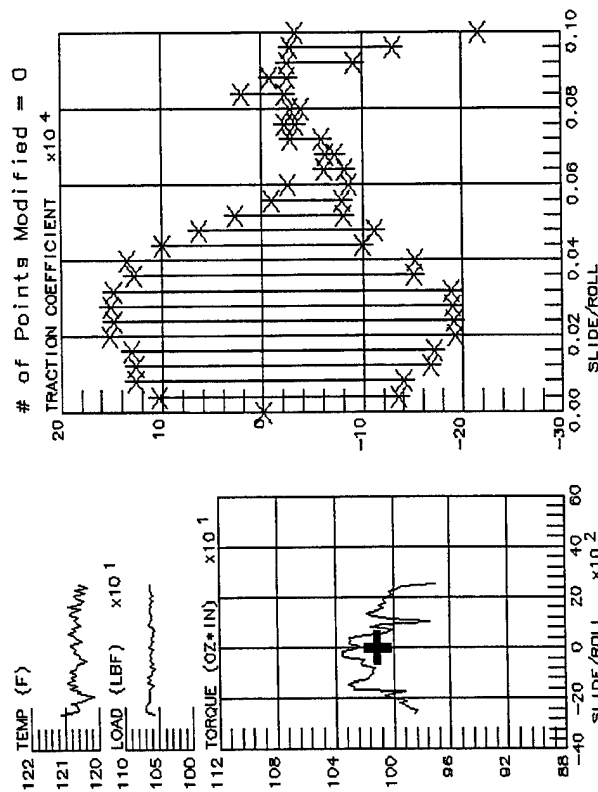
AI 85-42 Proplab #079-16 MIL-L-7808 #20
79F 77LBF 10600RPM 20 FILE: 077079

of Points Modified = 1



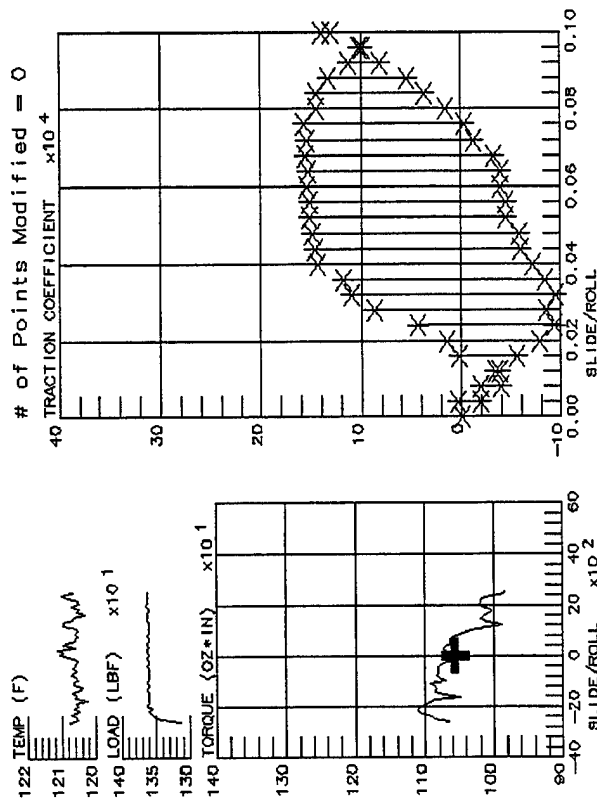
AI 85-42 Proplab #079-16 MIL-L-7808 #21
120F 8LBF 2620RPM 1 FILE: 077120

of Points Modified = 0



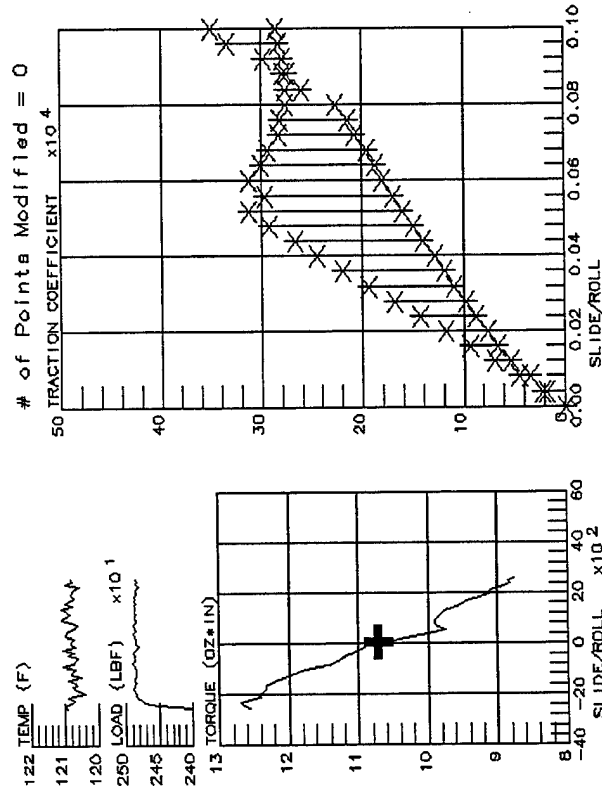
AI 85-42 Proplab #079-16 MIL-L-7808 #22
120F 11LBF 2620RPM 2 FILE: 077120

of Points Modified = 0



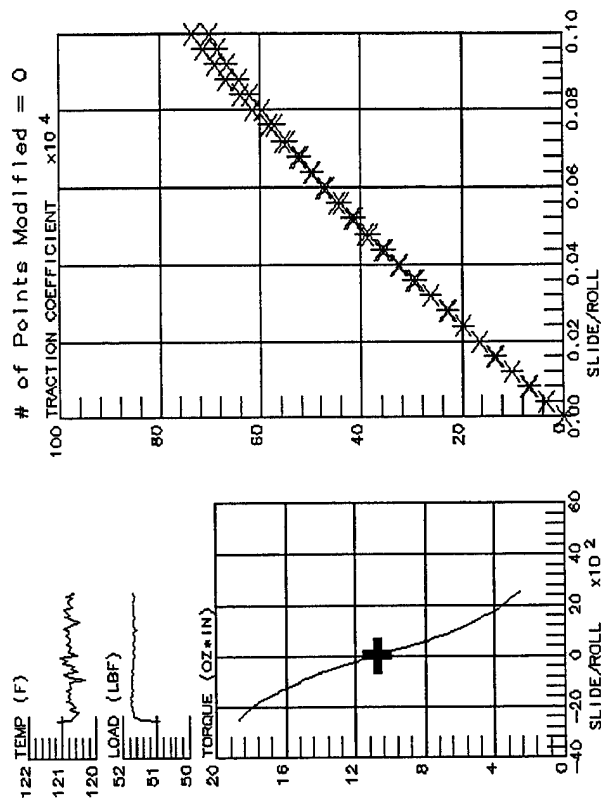
AI 85-42 Proplab #079-16 MIL-L-7808 #23
120F 23LBF 2620RPM 3 FILE: 077120

of Points Modified = 0



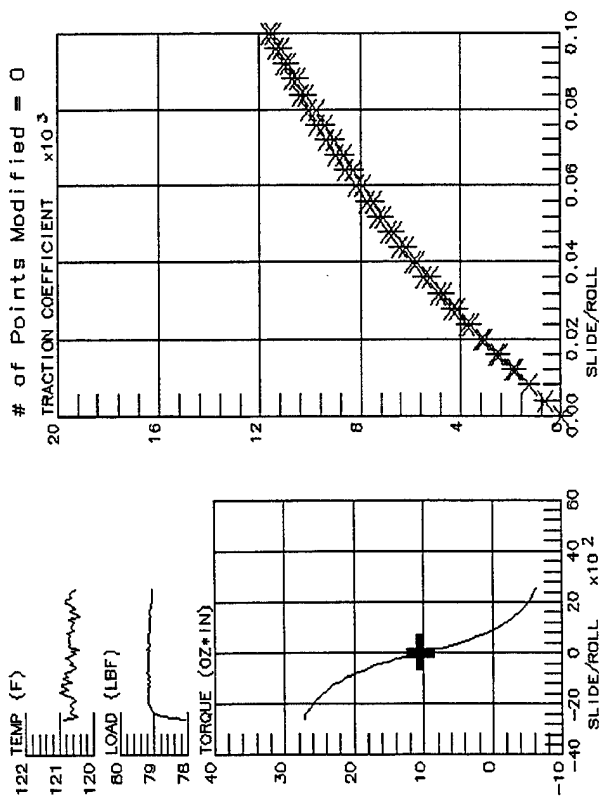
AI 85-42 Proplab #079-16 MIL-L-7808 #24
120F 50LBF 2620RPM 4 FILE: 077120

of Points Modified = 0

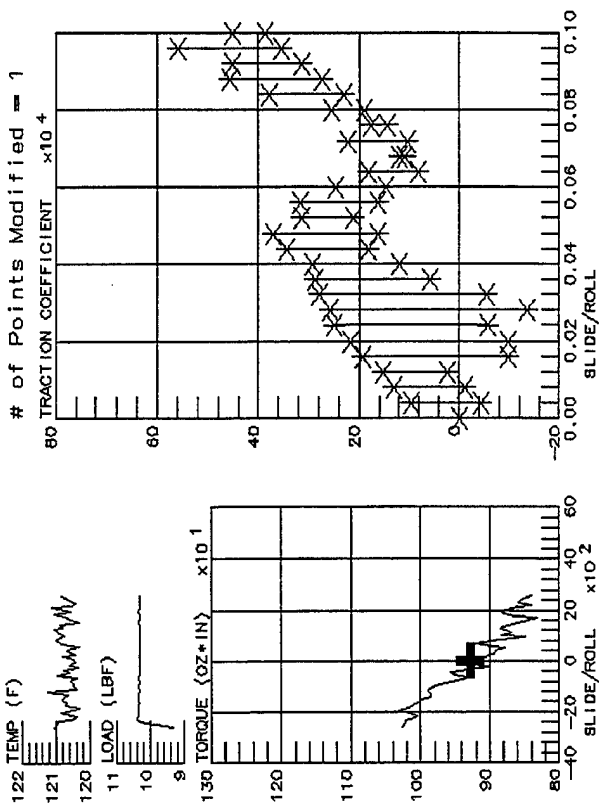


TRACTION CURVES

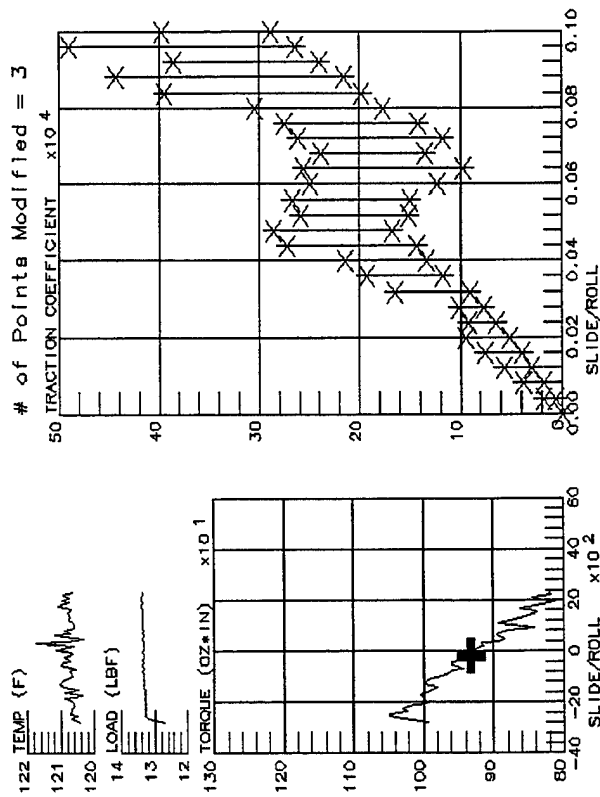
AI 85-42 Proplab #079-16 MIL-L-7808 #25
120F 77LBF 2620RPM 5 FILE: 077120



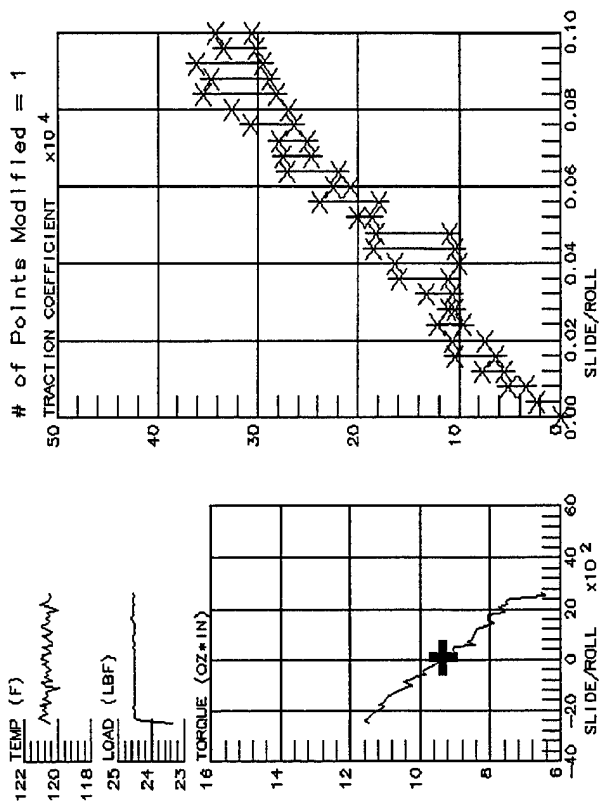
AI 85-42 Proplab #079-16 MIL-L-7808 #26
120F 8LBF 4880RPM 6 FILE: 077120



AI 85-42 Proplab #079-16 MIL-L-7808 #27
120F 11LBF 4880RPM 7 FILE: 077120

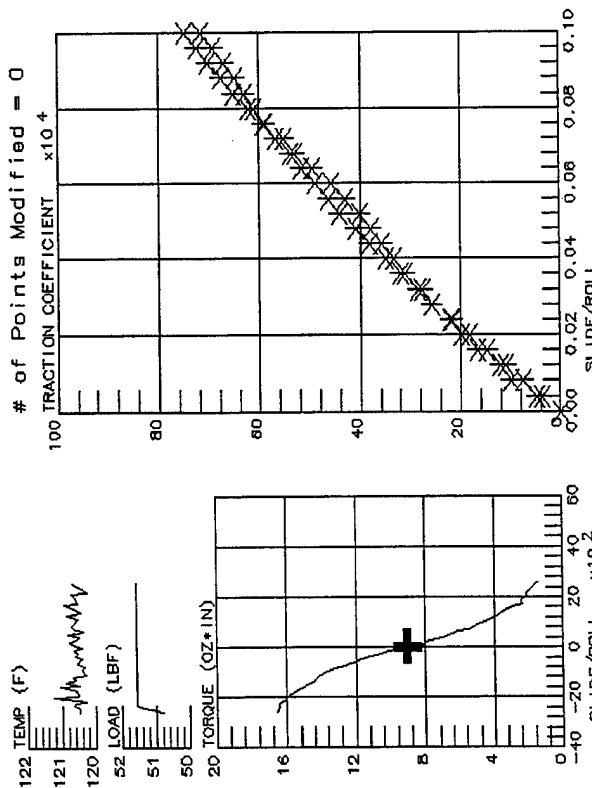


AI 85-42 Proplab #079-16 MIL-L-7808 #28
120F 23LBF 4880RPM 8 FILE: 077120



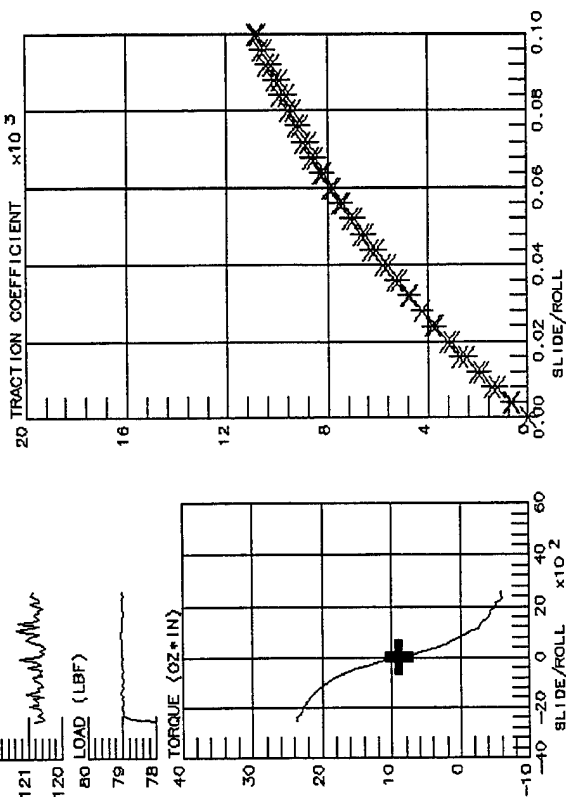
AI 85-42 Proplab #079-16 MIL-L-7808 #29
120F 50LBF 4880RPM 9 FILE: 077120

of Points Modified = 0



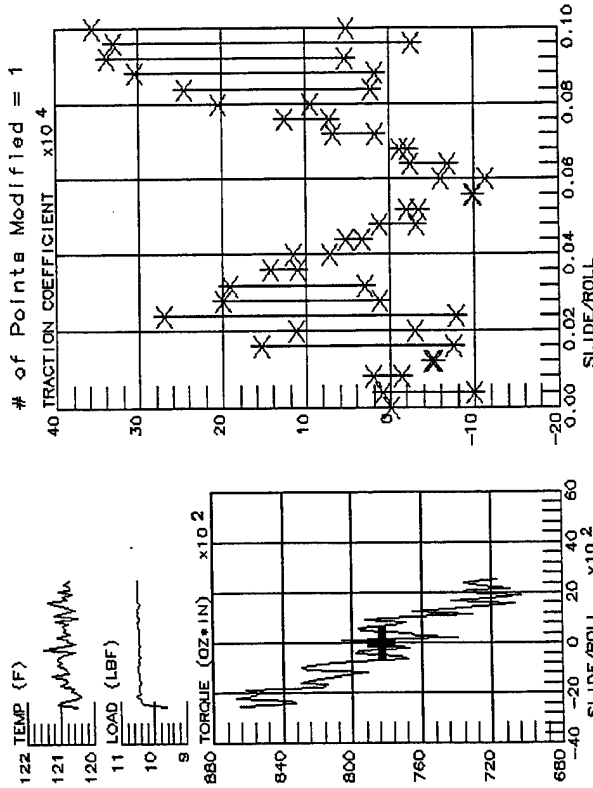
AI 85-42 Proplab #079-16 MIL-L-7808 #30
120F 77LBF 4880RPM 10 FILE: 077120

of Points Modified = 0



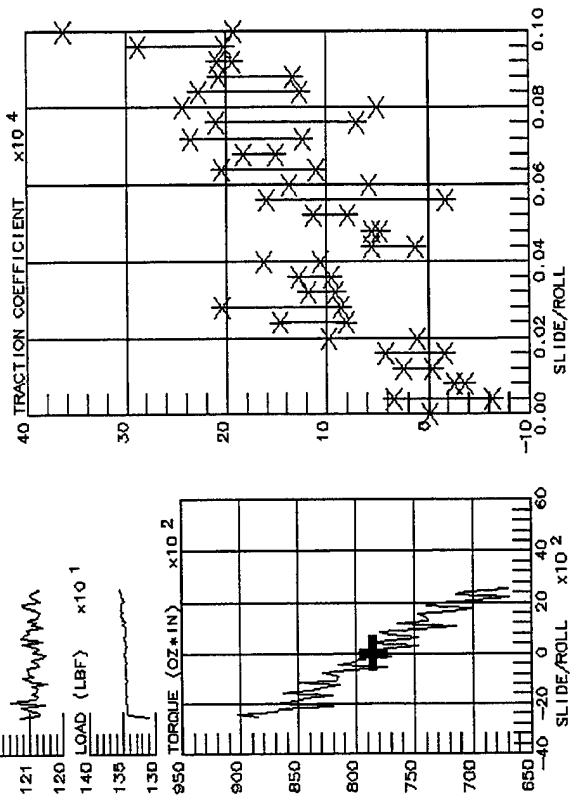
AI 85-42 Proplab #079-16 MIL-L-7808 #31
120F 8LBF 7050RPM 11 FILE: 077120

of Points Modified = 1



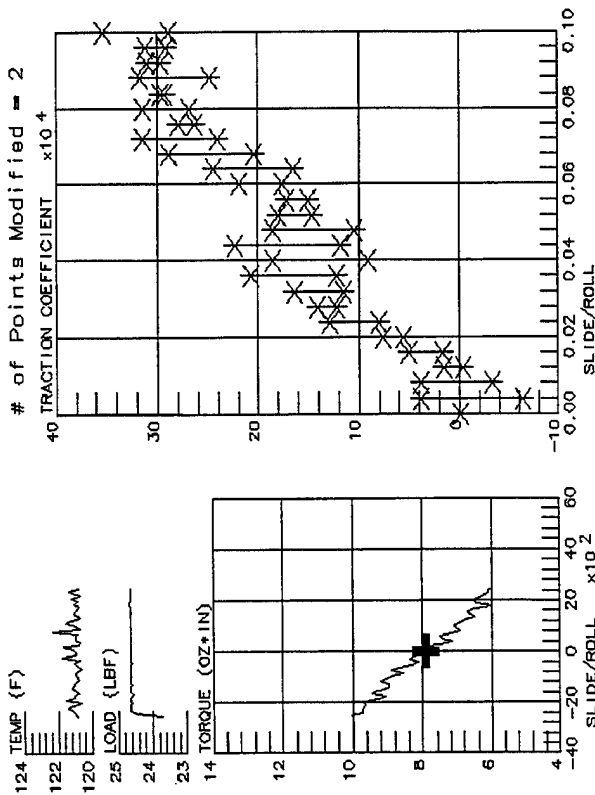
AI 85-42 Proplab #079-16 MIL-L-7808 #32
120F 11LBF 7050RPM 12 FILE: 077120

of Points Modified = 0

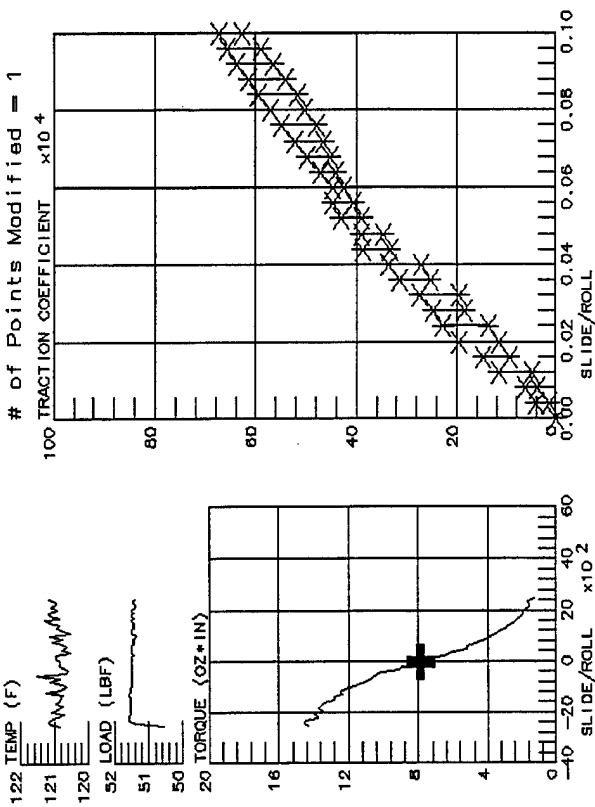


TRACTION LOGGING

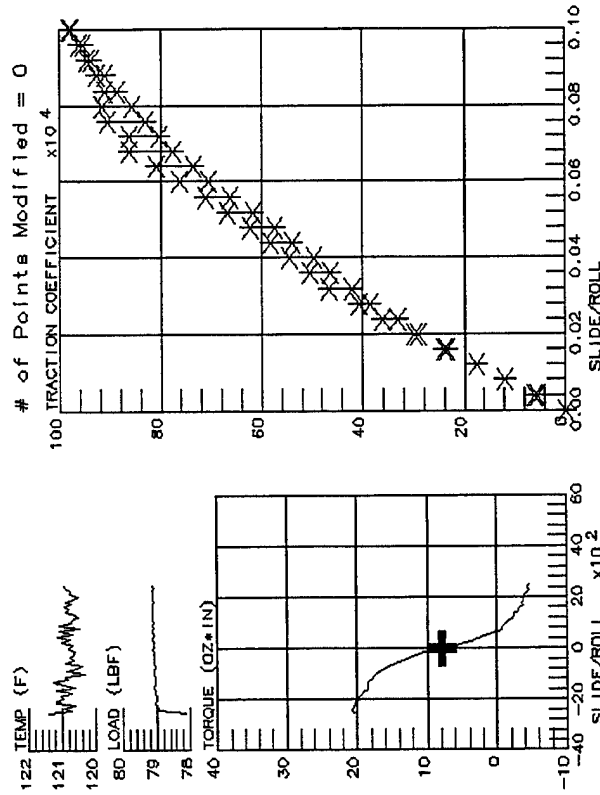
AI 85-42 Proplab #079-16 MIL-L-7808 #33
120F 23LBF 7050RPM 13 FILE: 077120



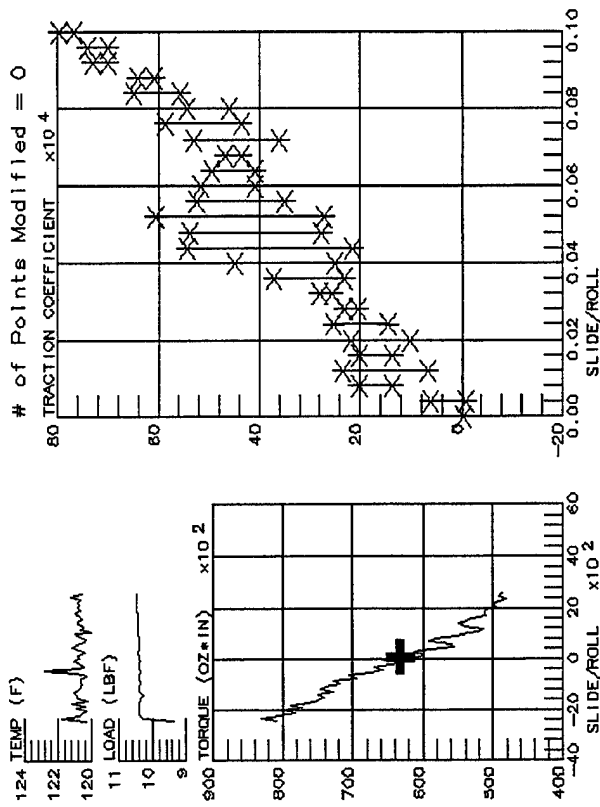
AI 85-42 Proplab #079-16 MIL-L-7808 #34
120F 60LBF 7050RPM 14 FILE: 077120



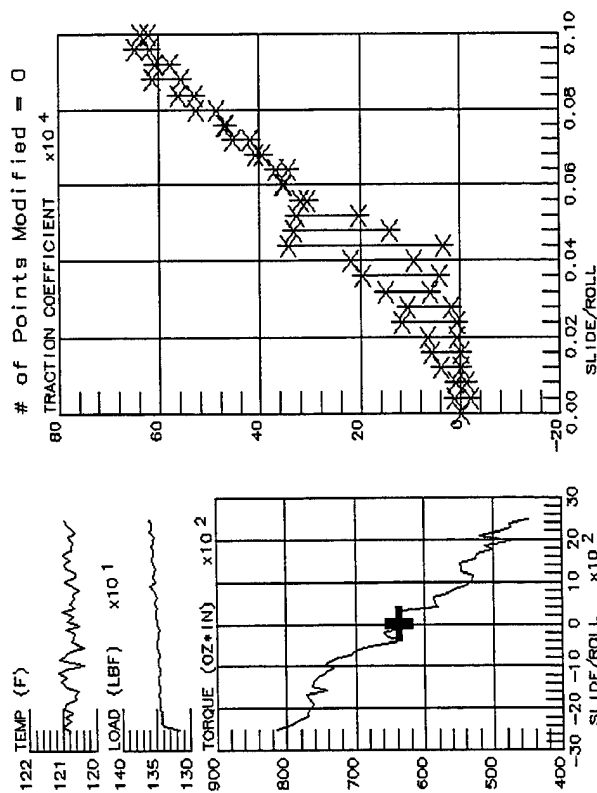
AI 85-42 Proplab #079-16 MIL-L-7808 #35
120F 77LBF 7050RPM 15 FILE: 077120



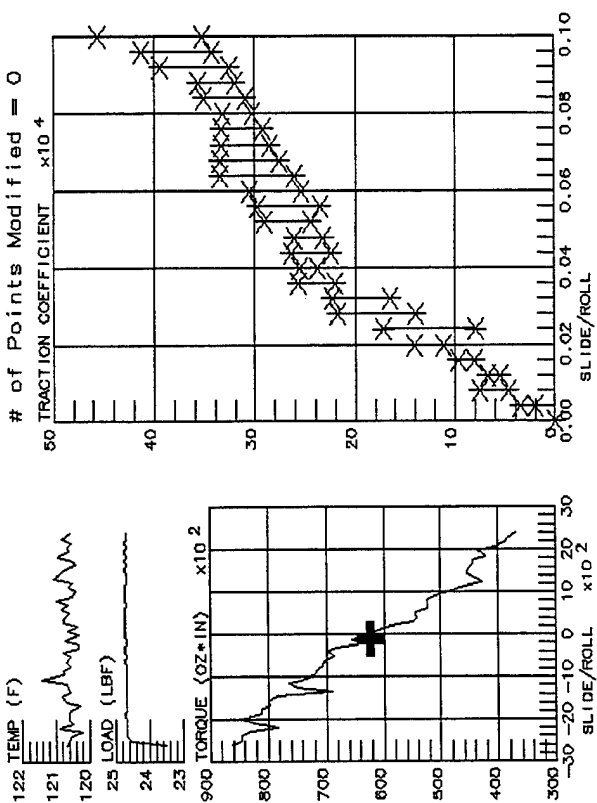
AI 85-42 Proplab #079-16 MIL-L-7808 #36
120F 8LBF 10600RPM 16 FILE: 077120



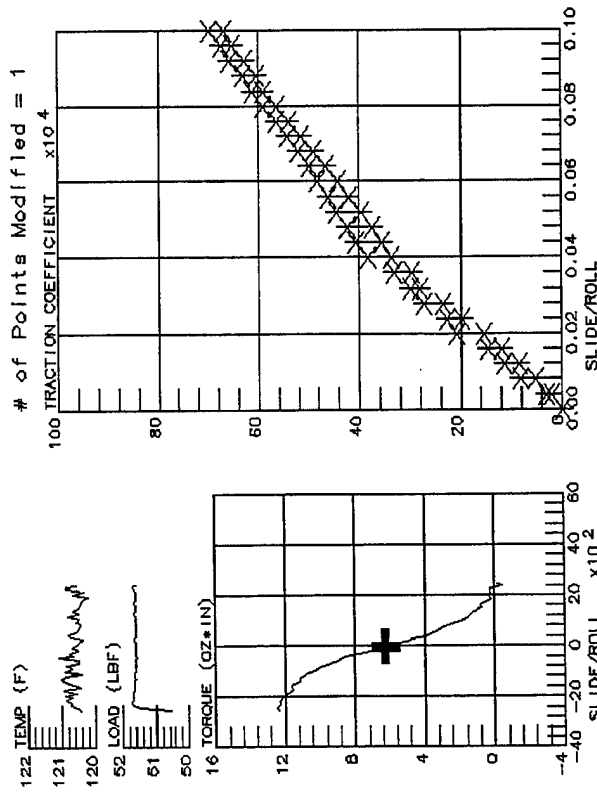
AI 85-42 Proplab #079-16 MIL-L-7808 #37
120F 11LBF 10600RPM 17 FILE: 077120



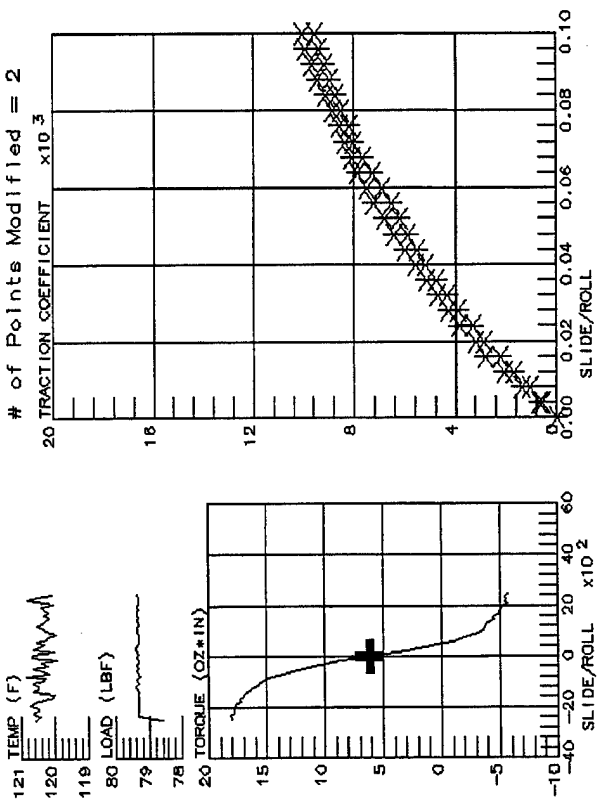
AI 85-42 Proplab #079-16 MIL-L-7808 #38
120F 23LBF 10600RPM 18 FILE: 077120



AI 85-42 Proplab #079-16 MIL-L-7808 #39
120F 50LBF 10600RPM 19 FILE: 077120

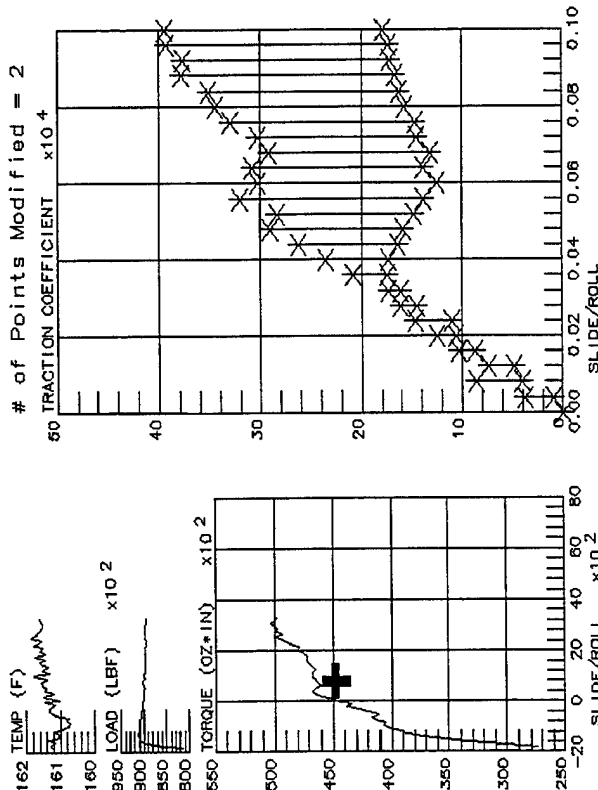


AI 85-42 Proplab #079-16 MIL-L-7808 #40
120F 77LBF 10600RPM 20 FILE: 077120

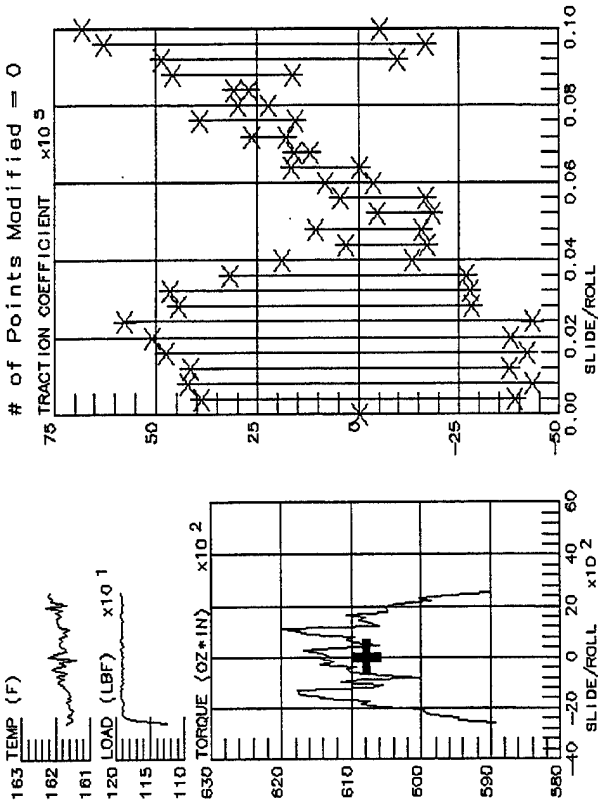


TRACTION MODES

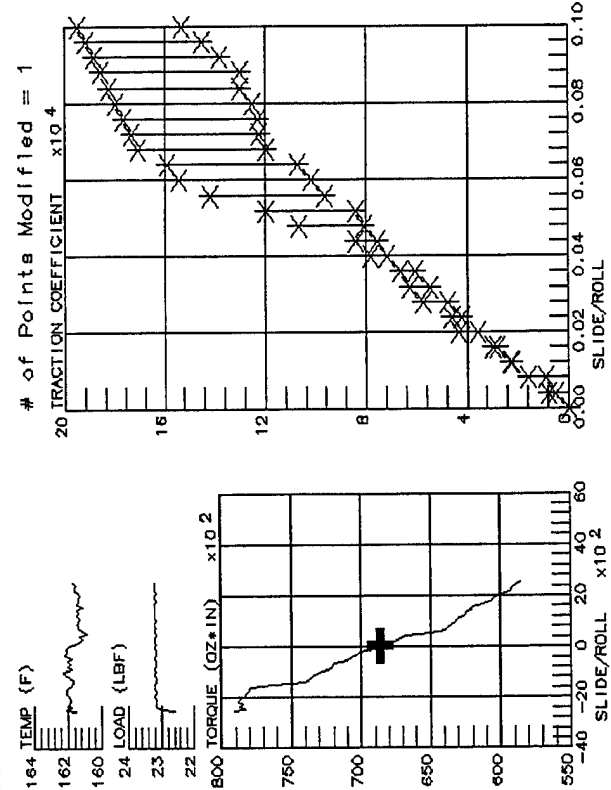
AI 85-42 Proplab #079-16 MIL-L-7808 #41
159F 8LBF 2620RPM 1 FILE: 077159



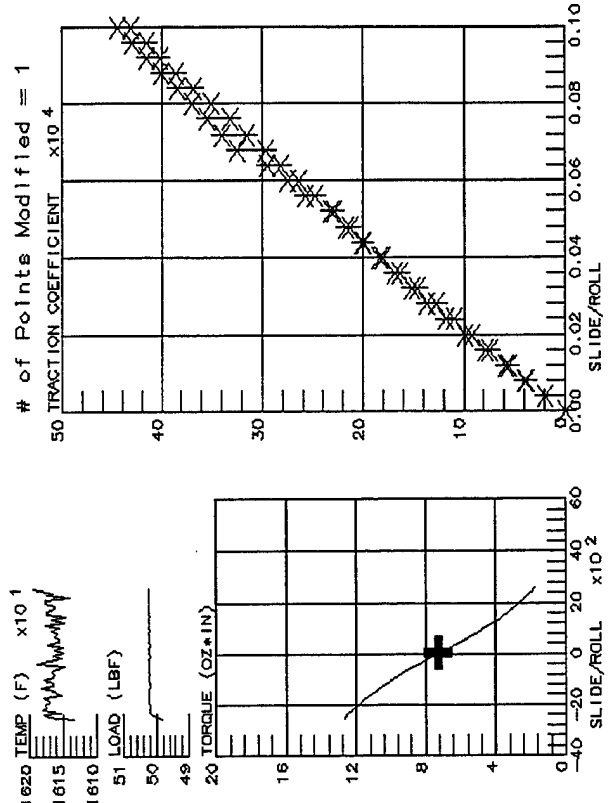
AI 85-42 Proplab #079-16 MIL-L-7808 #42
159F 11LBF 2620RPM 2 FILE: 077159



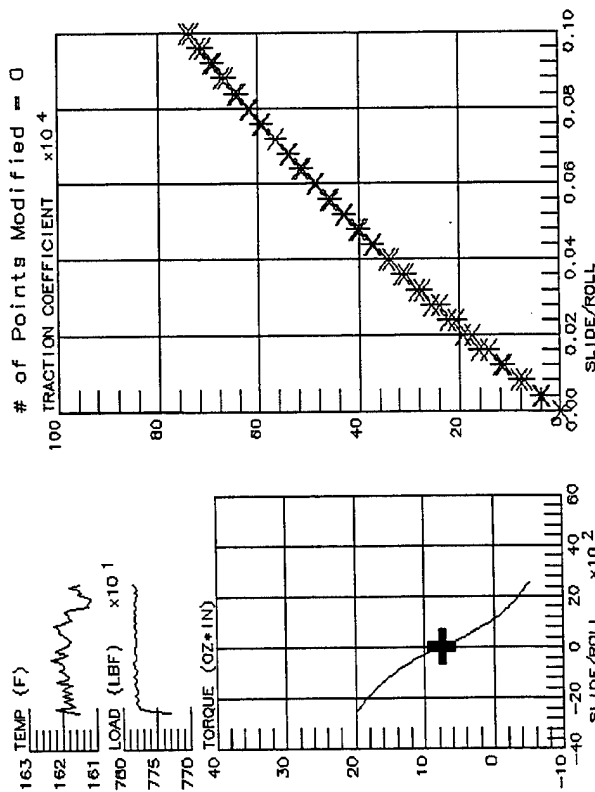
AI 85-42 Proplab #079-16 MIL-L-7808 #43
159F 23LBF 2620RPM 3 FILE: 077159



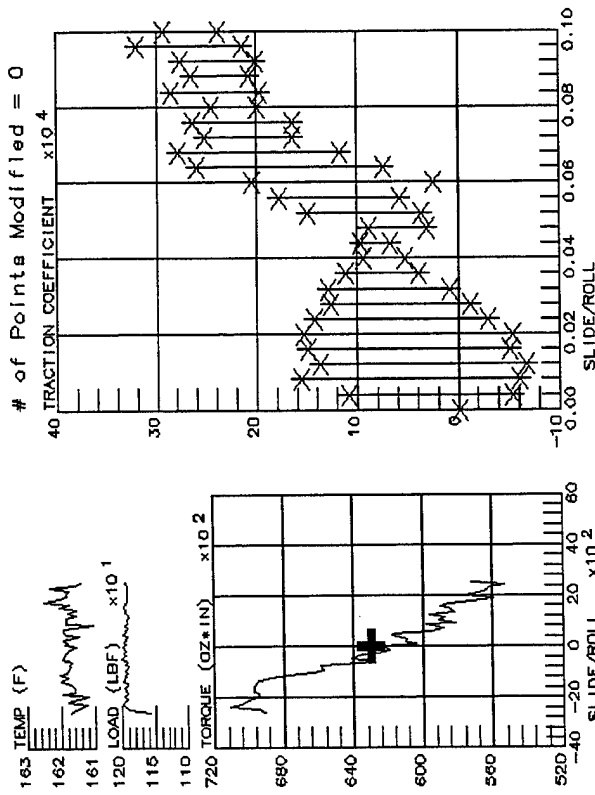
AI 85-42 Proplab #079-16 MIL-L-7808 #44
159F 50LBF 2620RPM 4 FILE: 077159



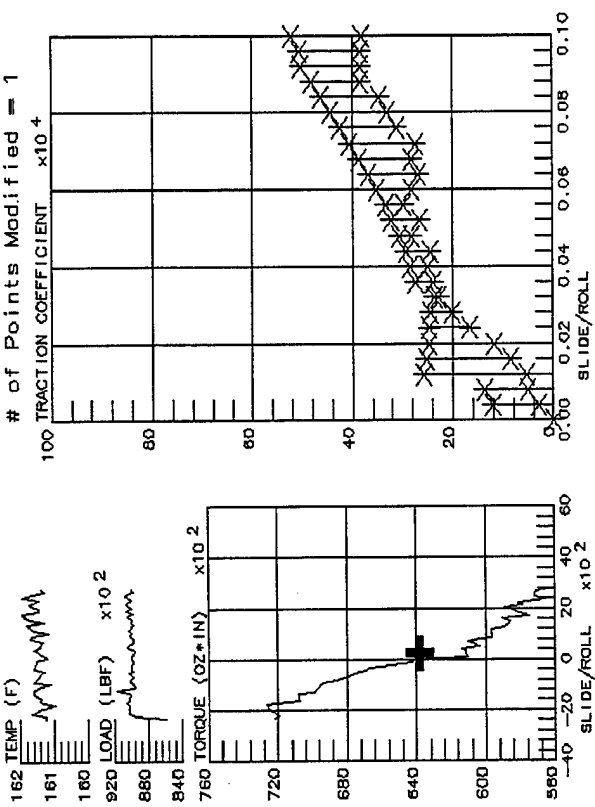
AI 85-42 PropLab #079-16 MIL-L-7808 #45
159F 77LBF 2620RPM 5 FILE: 077159



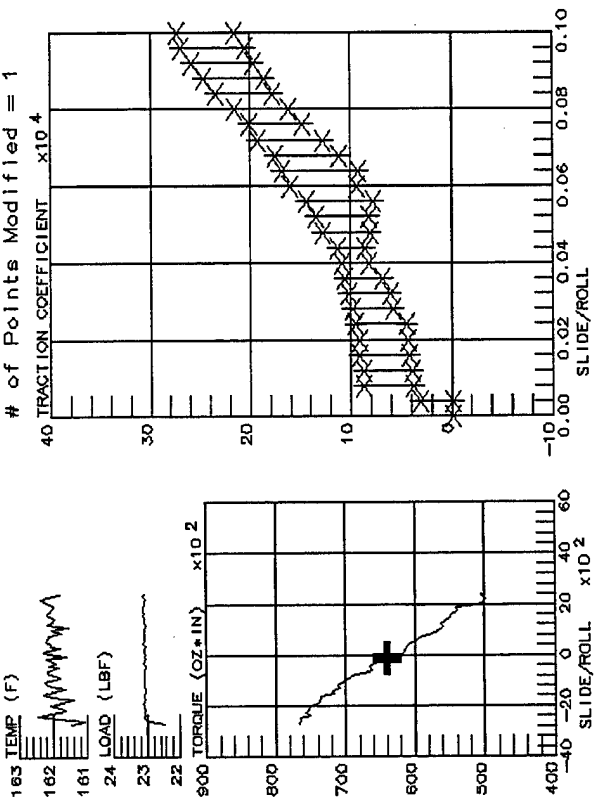
AI 85-42 PropLab #079-16 MIL-L-7808 #47
159F 111LBF 4880RPM 7 FILE: 077159



AI 85-42 PropLab #079-16 MIL-L-7808 #46
159F 8LBF 4880RPM 6 FILE: 077159

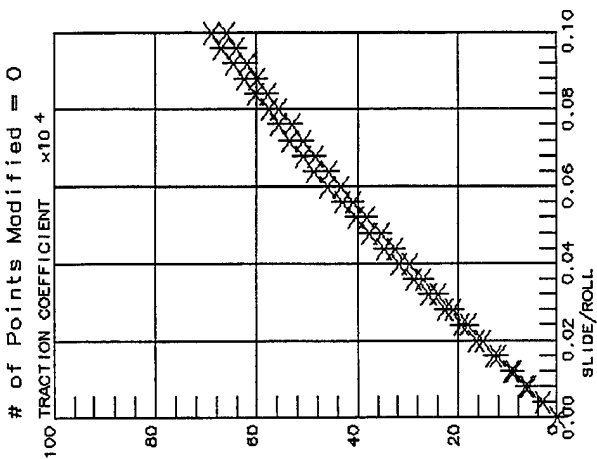
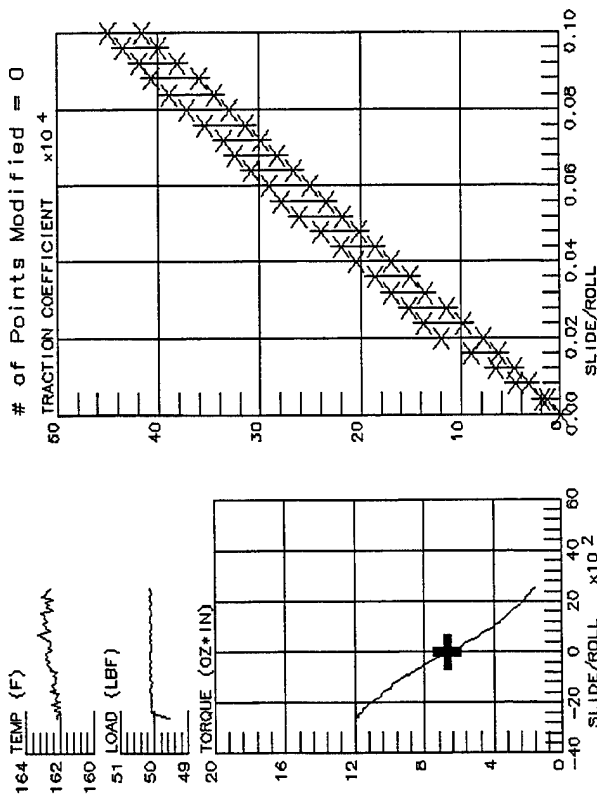


AI 85-42 PropLab #079-16 MIL-L-7808 #48
159F 23LBF 4880RPM 8 FILE: 077159

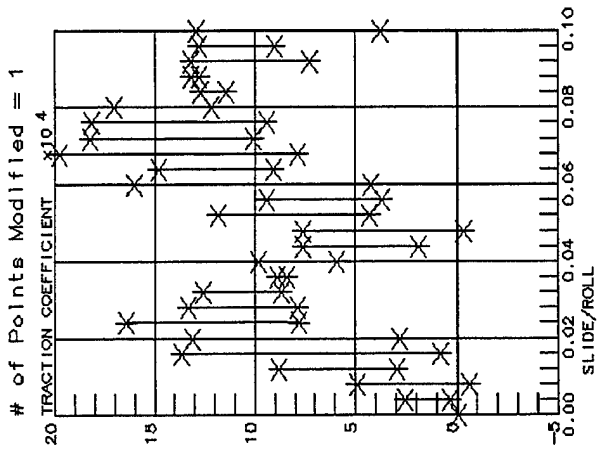
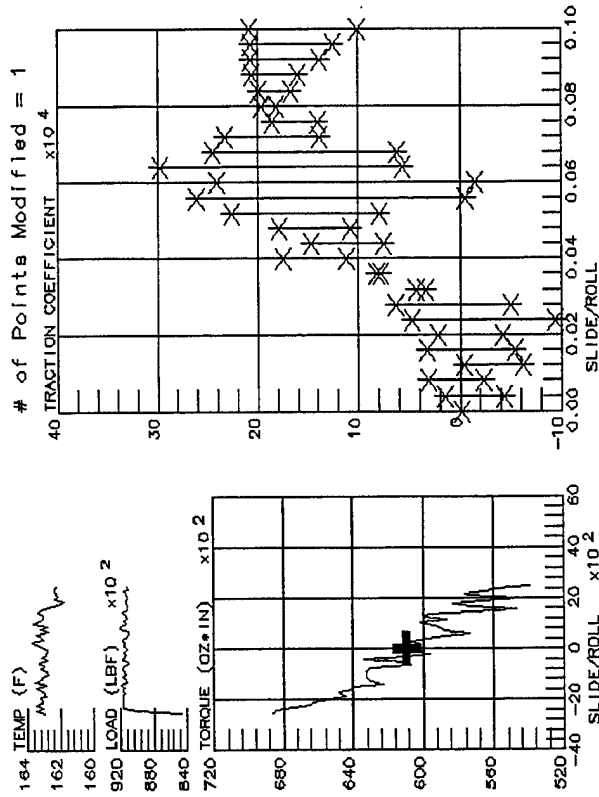


TRACTION COEFFICIENT

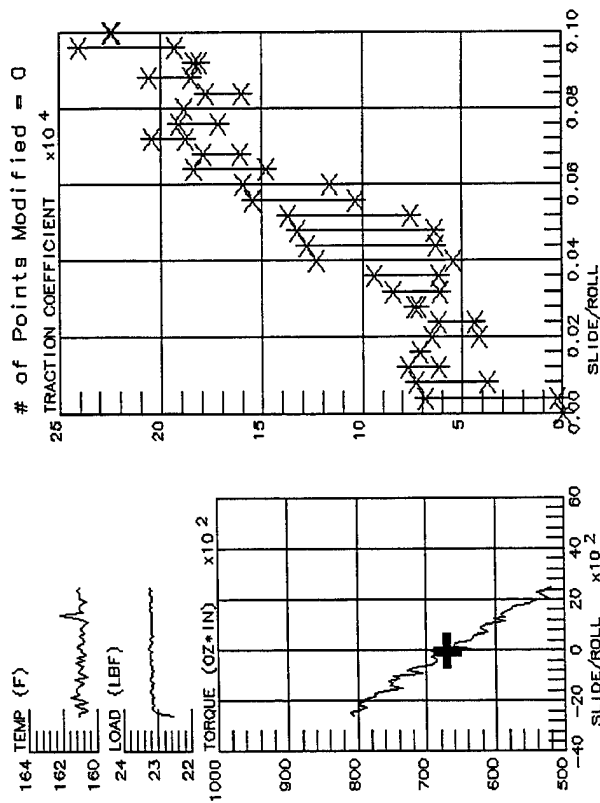
AI 85-42 Proplab #079-16 MIL-L-7808 #49
159F 50LBF 480RPM 9 FILE: 077159



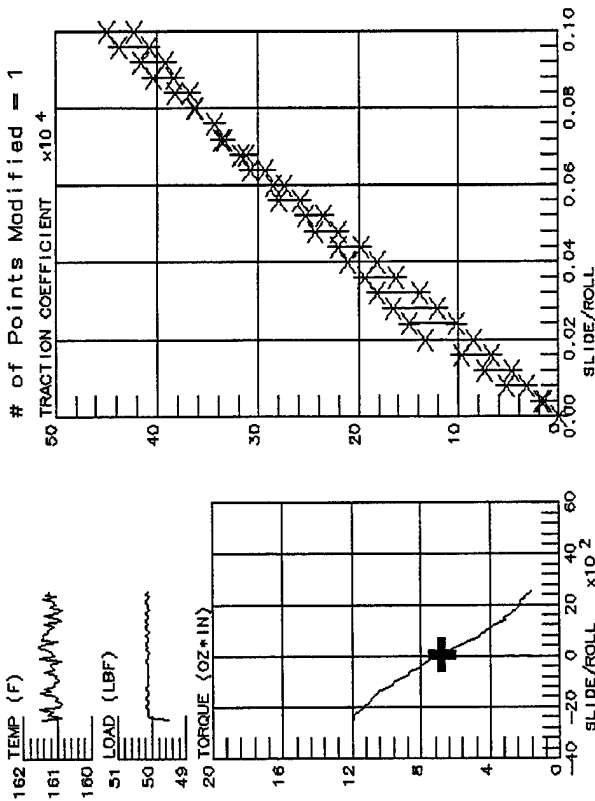
AI 85-42 Proplab #079-16 MIL-L-7808 #51
159F 8LBF 7050RPM 11 FILE: 077159



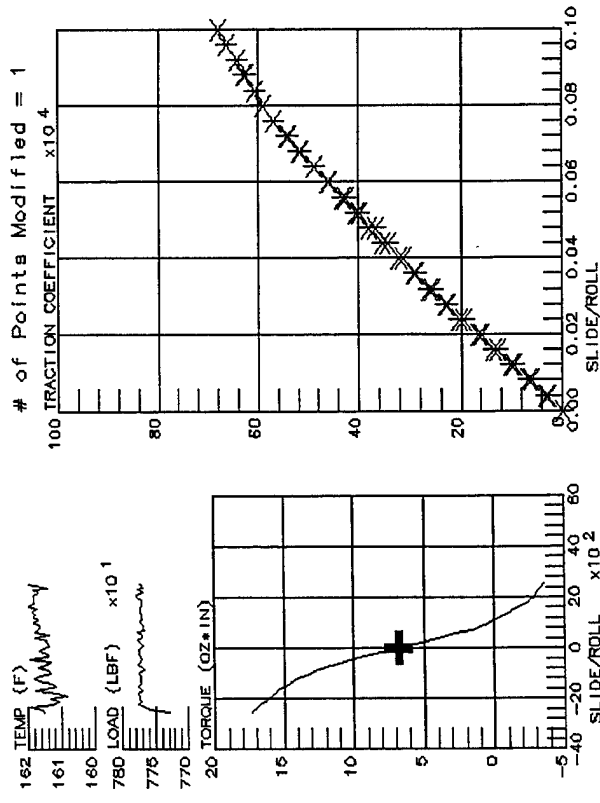
AI 85-42 PropLab #079-16 MIL-L-7808 #53
159F 23LBF 7050RPM 13 FILE: 077159



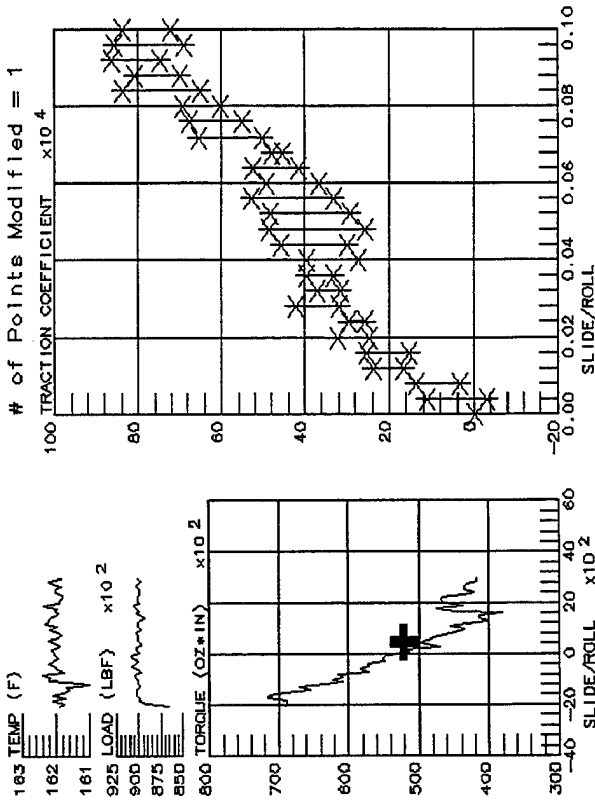
AI 85-42 PropLab #079-16 MIL-L-7808 #54
159F 50LBF 7060RPM 14 FILE: 077159



AI 85-42 PropLab #079-16 MIL-L-7808 #55
159F 77LBF 7050RPM 15 FILE: 077159

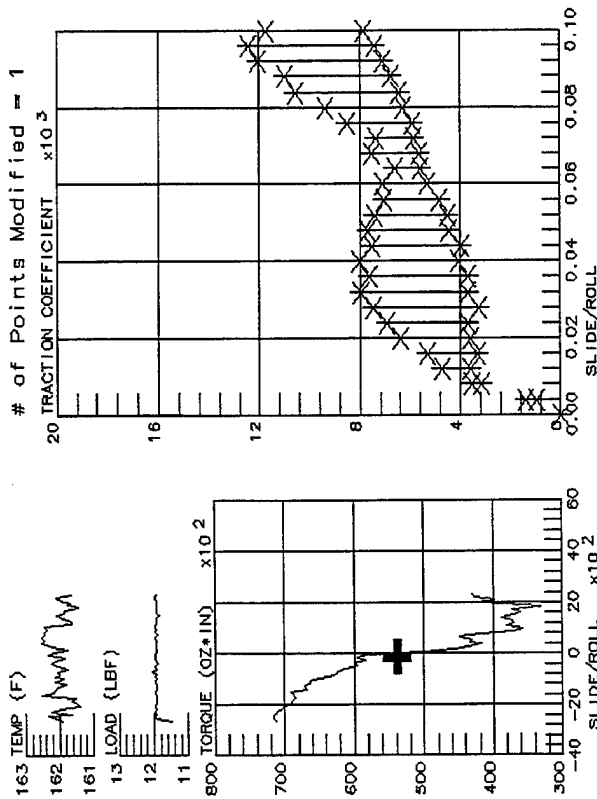


AI 85-42 PropLab #079-16 MIL-L-7808 #56
159F 8LBF 10600RPM 16 FILE: 077159

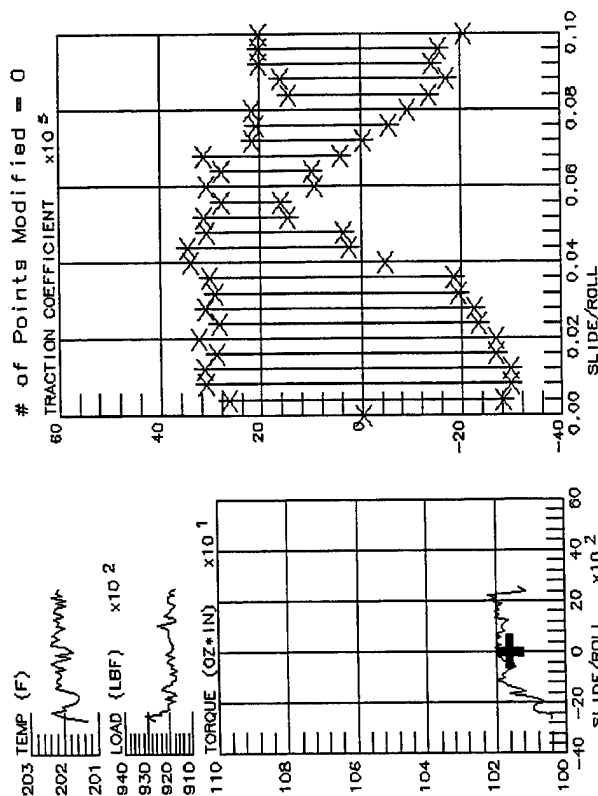


TRACTION MODULUS

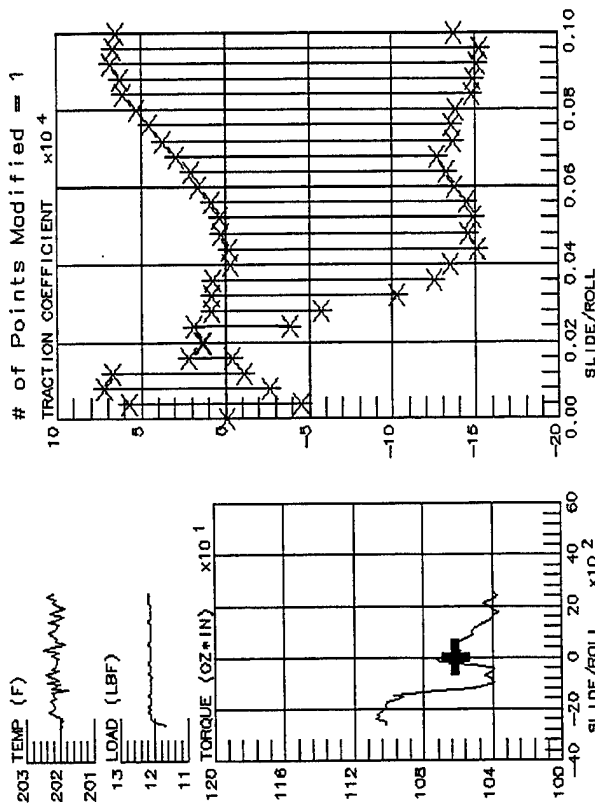
AI 85-42 Proplab #079-16 MIL-L-7808 #57
159F 111BF 10600RPM 17 FILE: 077159



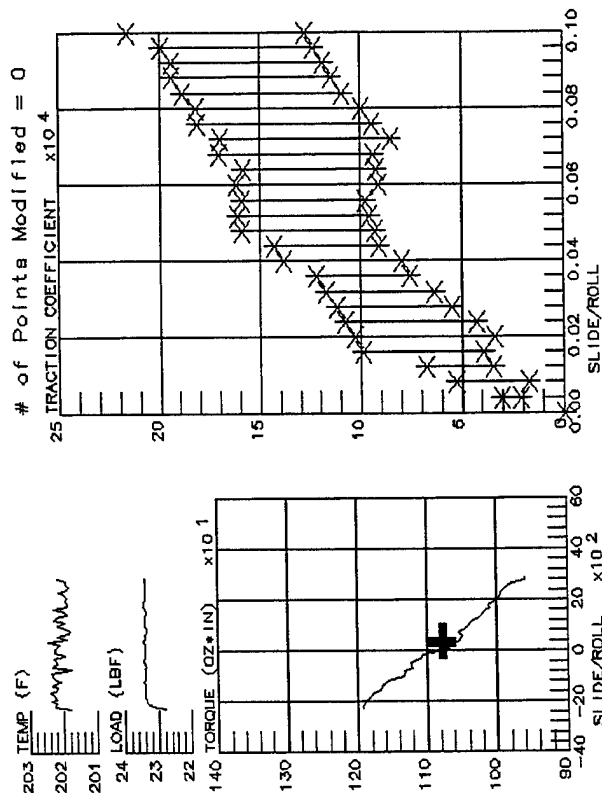
AI 85-42 PropLab #079-16 MIL-L-7808 #61
200F 8LBF 2620RPM 1 FILE: 077200



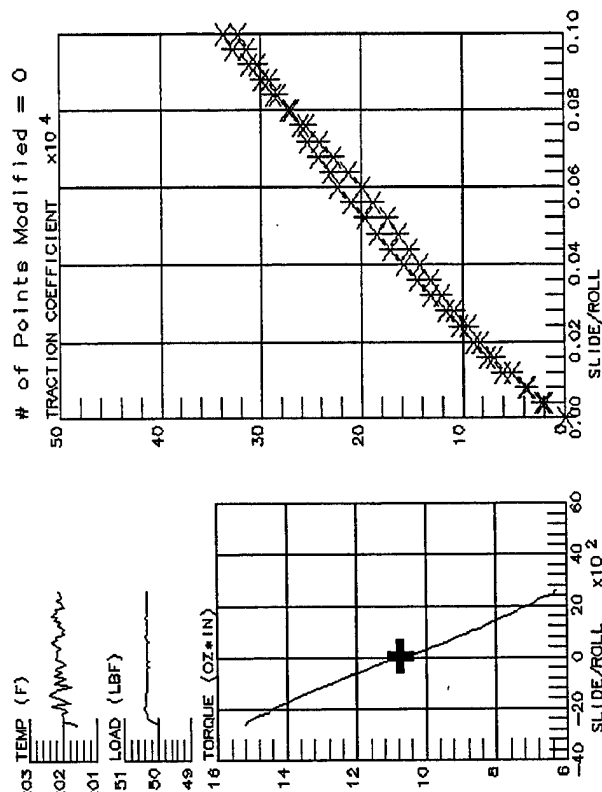
AI 85-42 PropLab #079-16 MIL-L-7808 #62
200F 11LBF 2620RPM 2 FILE: 077200



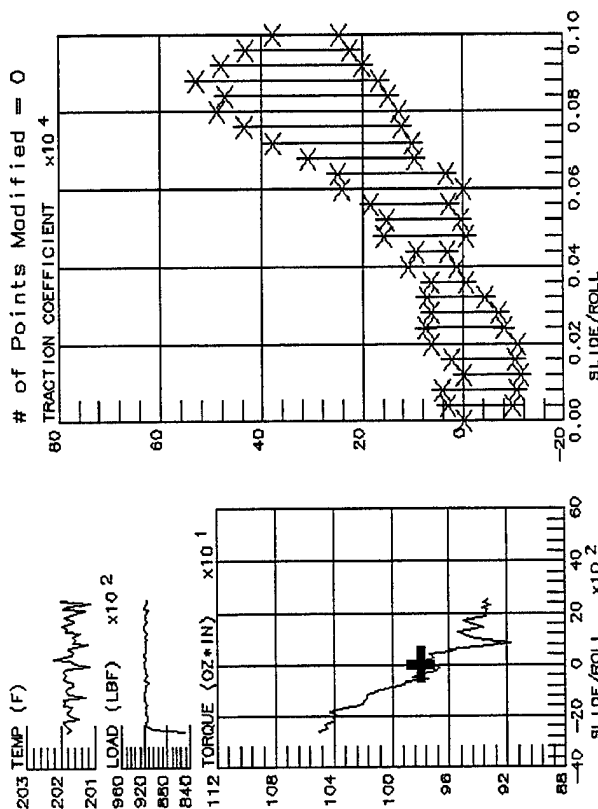
AI 85-42 PropLab #079-16 MIL-L-7808 #63
200F 23LBF 2620RPM 3 FILE: 077200



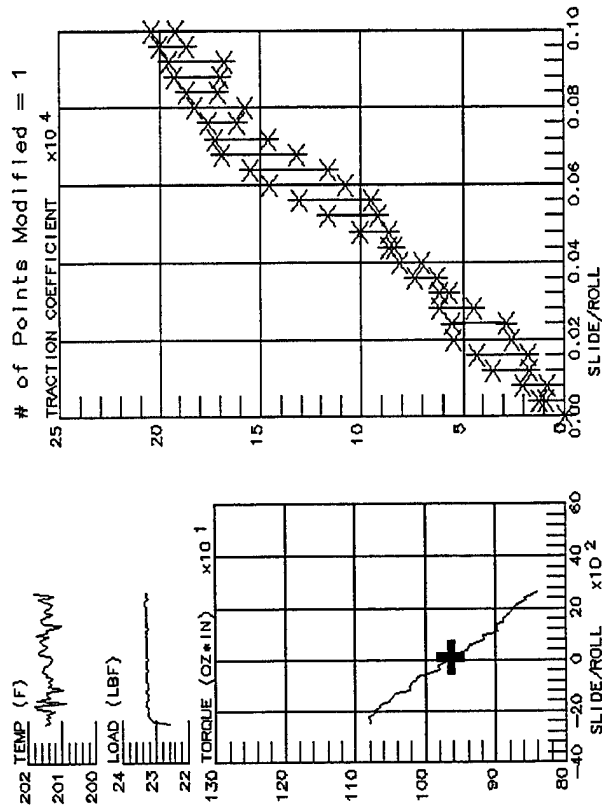
AI 85-42 PropLab #079-16 MIL-L-7808 #64
200F 50LBF 2620RPM 4 FILE: 077200



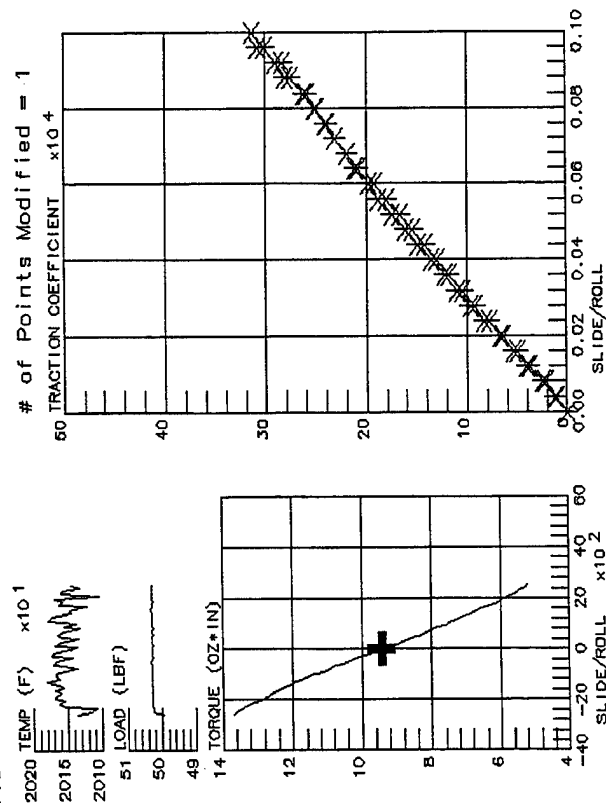
SHINGO NOHARA



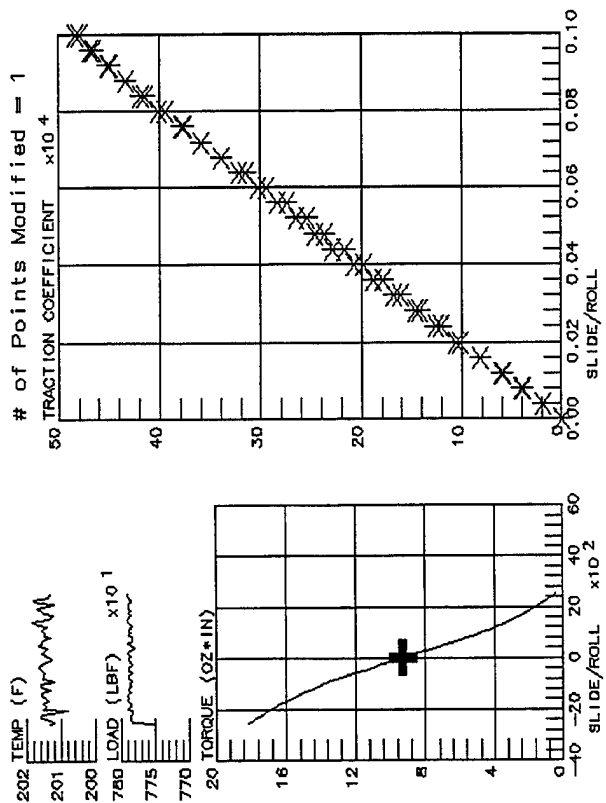
AI 85-42 PropLab #079-16 MIL-L-7808 #68
2200F 23LBF 4880RPM 8 FILE: 077200



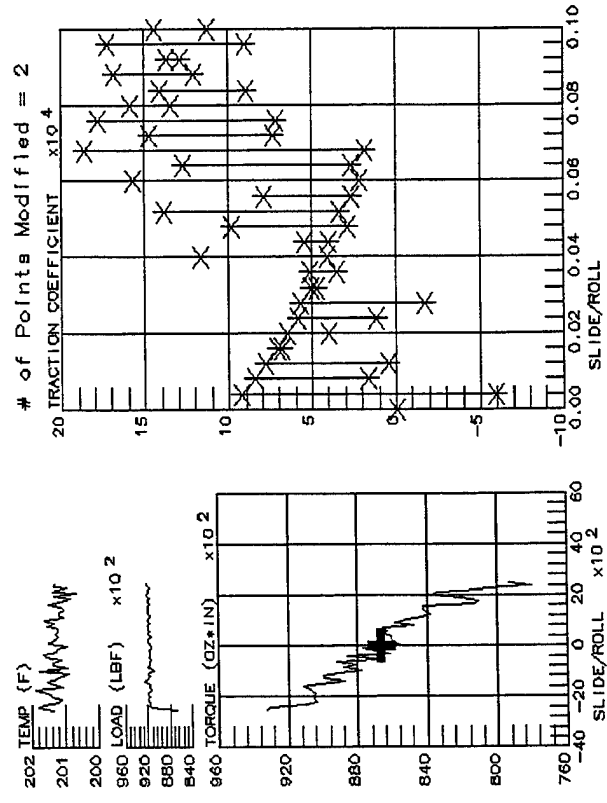
AI 85-42 Proplab #079-16 MIL-L-7808 #69
200F 50LBF 4880RPM 9 FILE: 077200



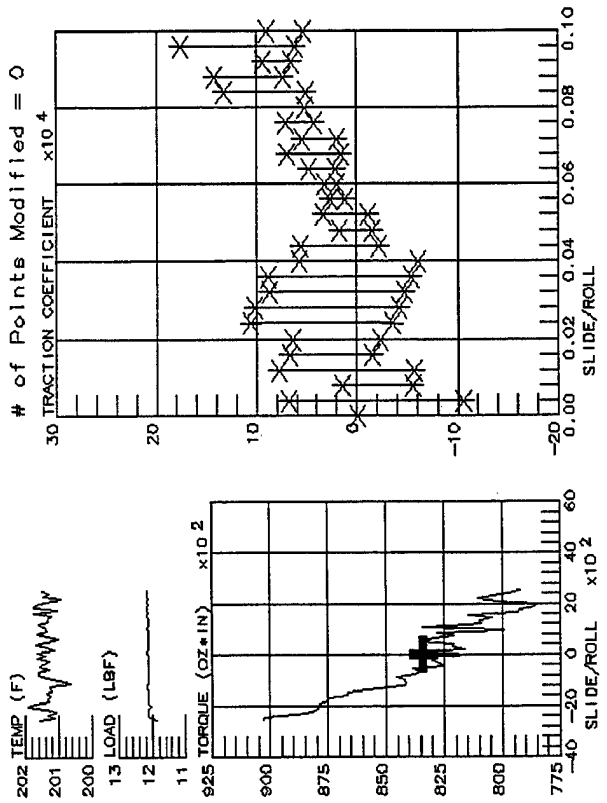
AI 85-42 Proplab #079-16 MIL-L-7808 #70
200F 77LBF 4880RPM 10 FILE: 077200



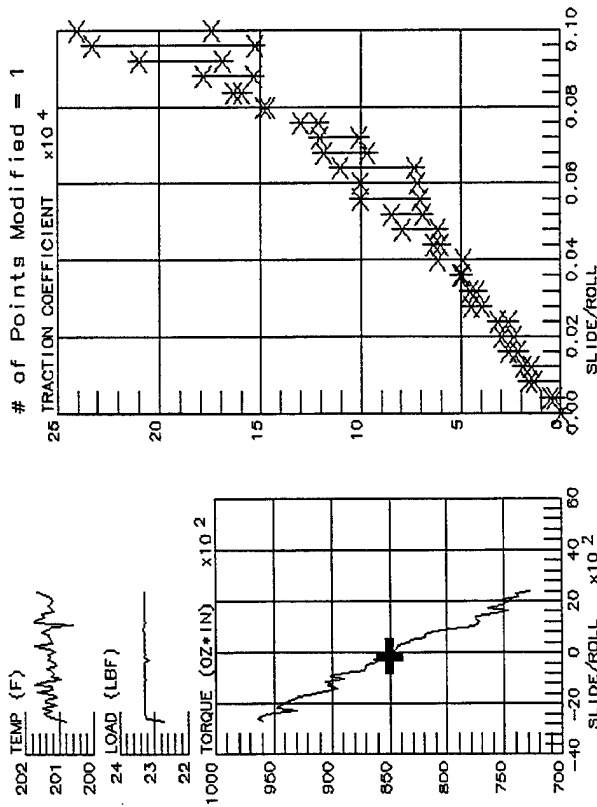
AI 85-42 Proplab #079-16 MIL-L-7808 #71
200F 8LBF 7050RPM 11 FILE: 077200



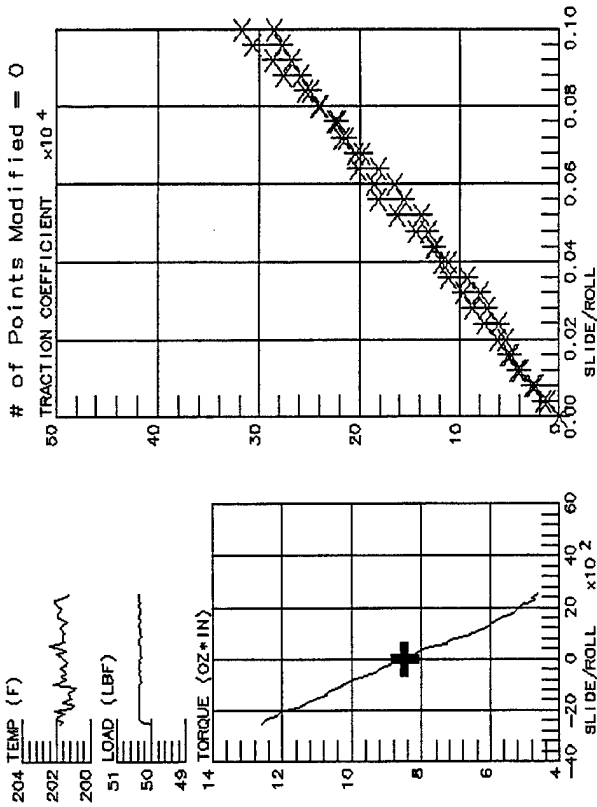
AI 85-42 Proplab #079-16 MIL-L-7808 #72
200F 11LBF 7050RPM 12 FILE: 077200



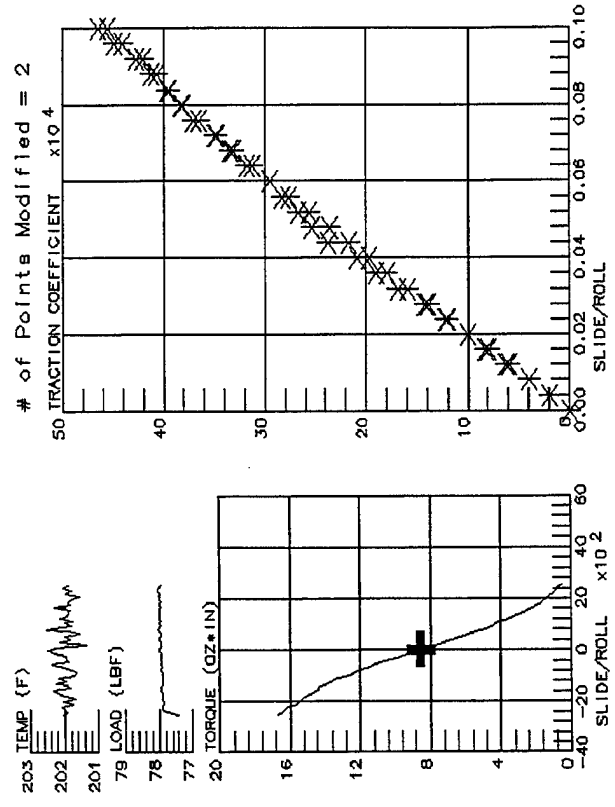
AI 85-42 Proplab #079-16 MIL-L-7808 #73
200F 23LBF 7050RPM 13 FILE: 077200



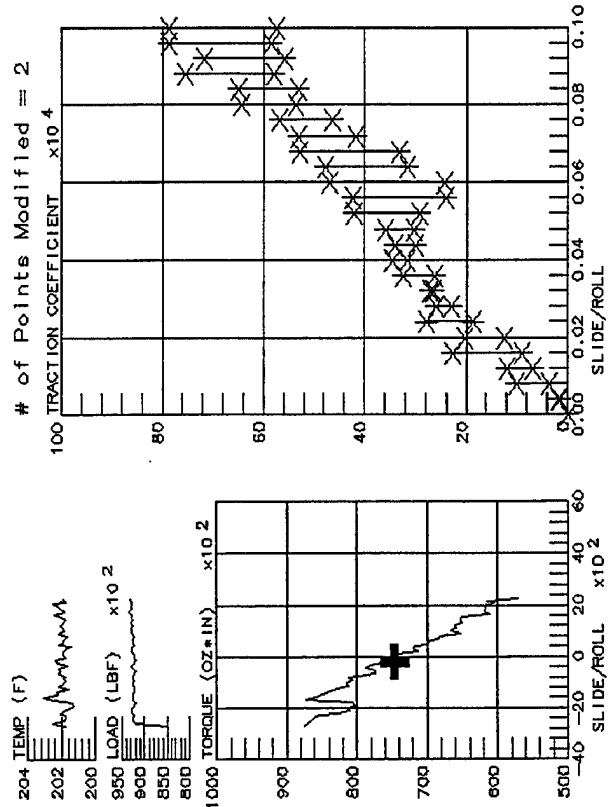
AI 85-42 Proplab #079-16 MIL-L-7808 #74
200F 60LBF 7050RPM 14 FILE: 077200



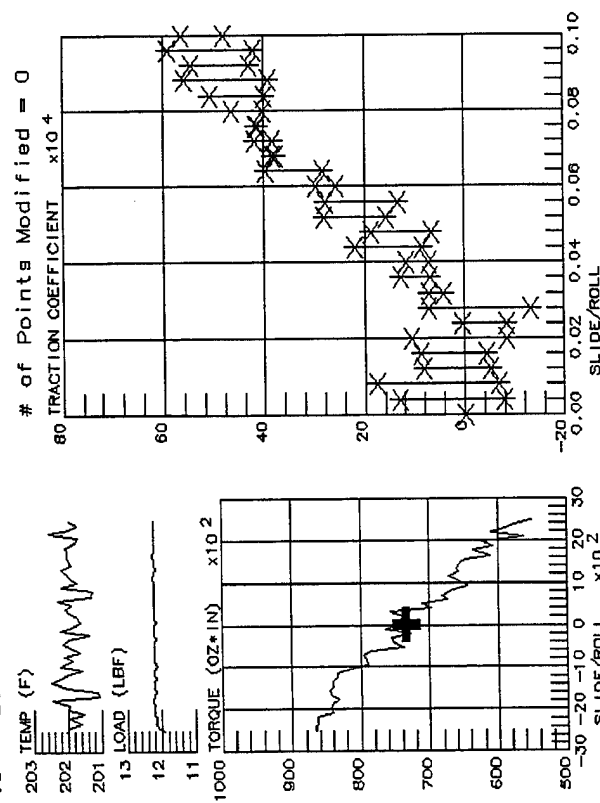
AI 85-42 Proplab #079-16 MIL-L-7808 #75
200F 77LBF 7050RPM 15 FILE: 077200



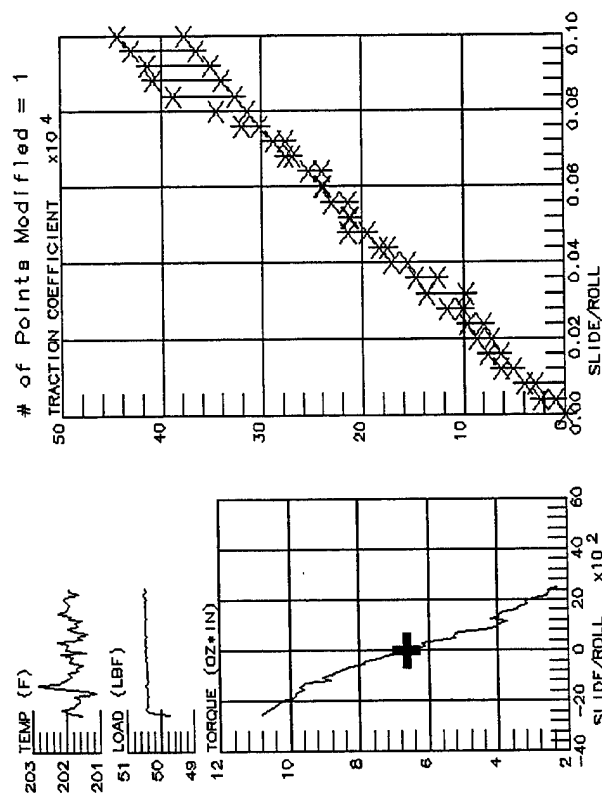
AI 85-42 Proplab #079-16 MIL-L-7808 #76
200F 8LBF 10600RPM 16 FILE: 077200



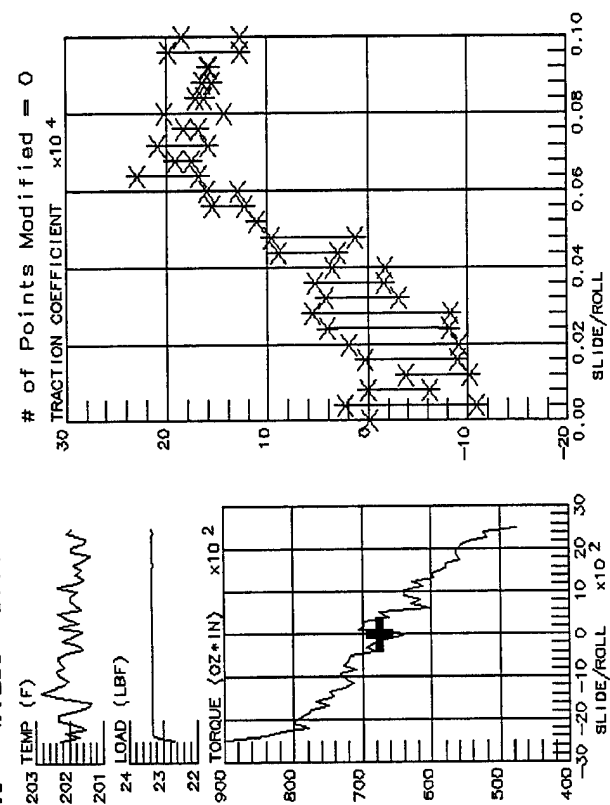
AI 85-42 ProLab #079-16 MIL-L-7808 #77
200F 111BF 10600RPM 17 FILE: 077200



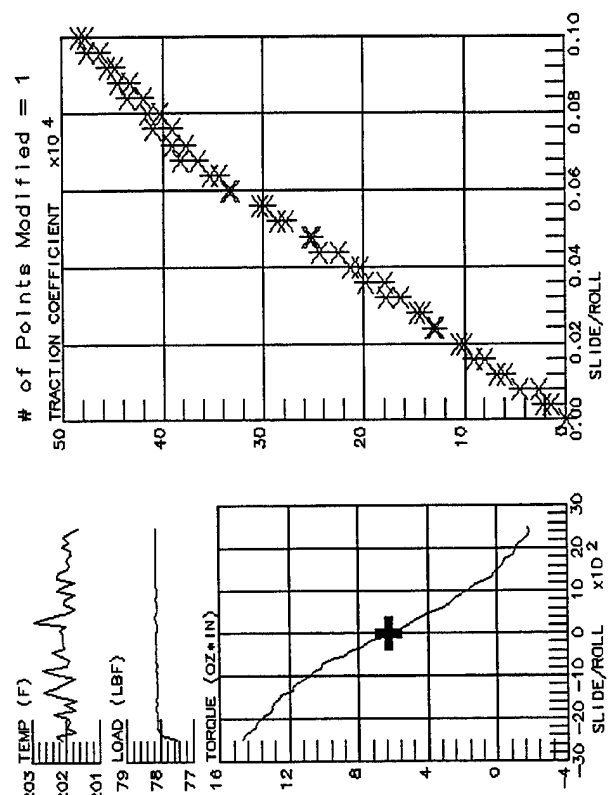
AI 85-42 ProLab #079-16 MIL-L-7808 #79
200F 50LBF 10600RPM 19 FILE: 077200



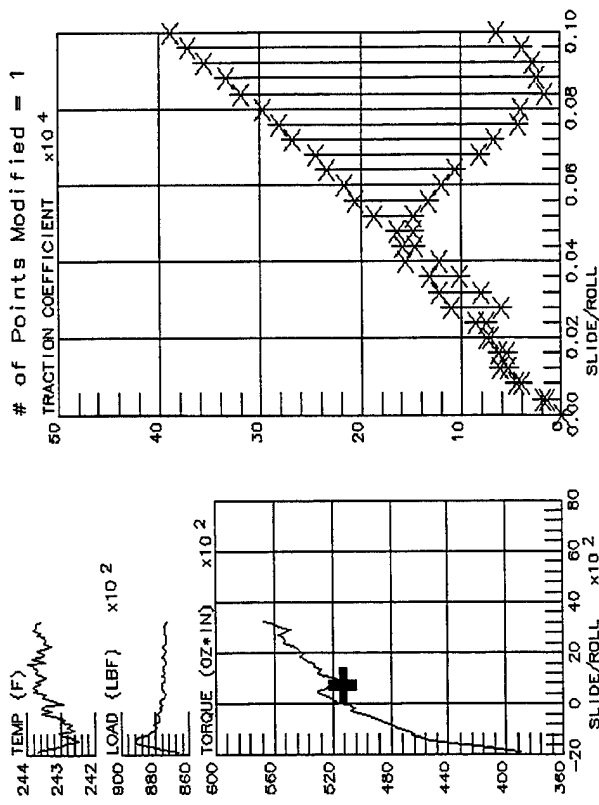
AI 85-42 ProLab #079-16 MIL-L-7808 #78
200F 23LBF 10600RPM 18 FILE: 077200



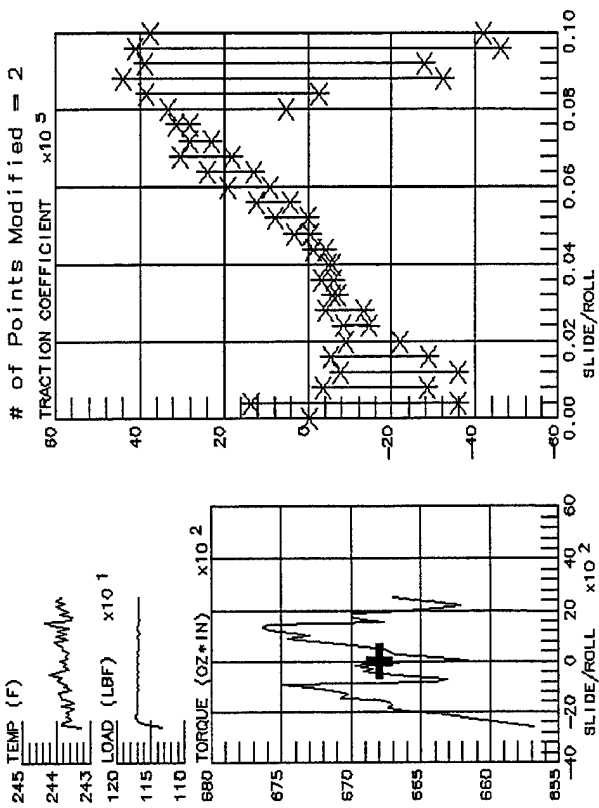
AI 85-42 ProLab #079-16 MIL-L-7808 #80
200F 77LBF 10600RPM 20 FILE: 077200



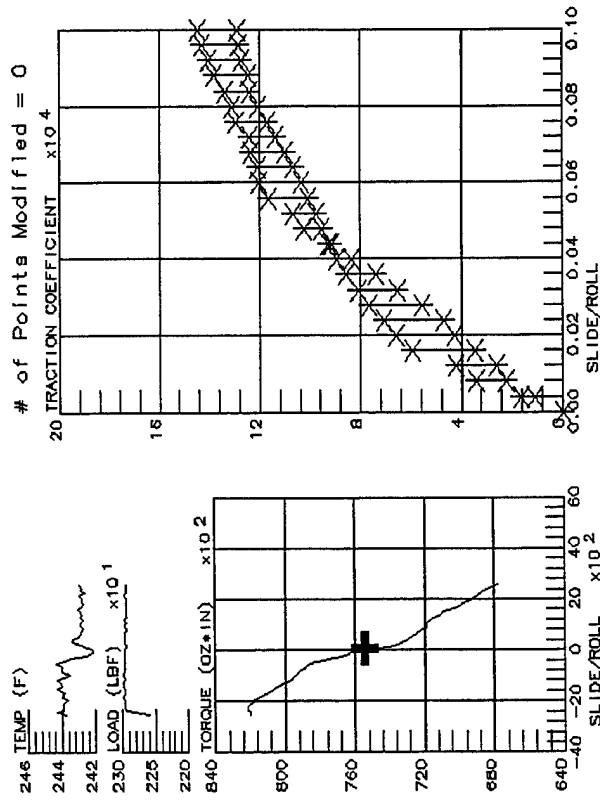
AI 85-42 PropLab #079-16 MIL-L-7808 #81
240F 8LBF 2620RPM 1 FILE: 077240



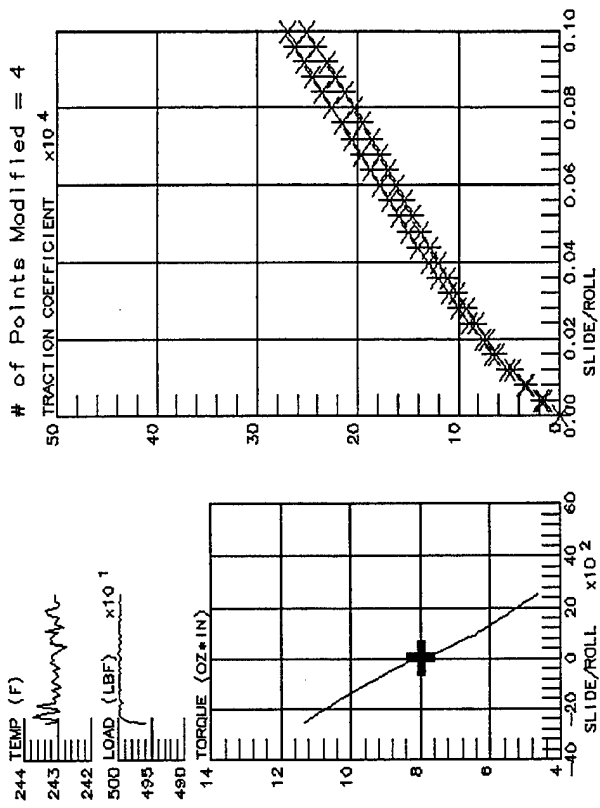
AI 85-42 PropLab #079-16 MIL-L-7808 #82
240F 11LBF 2620RPM 2 FILE: 077240



AI 85-42 PropLab #079-16 MIL-L-7808 #83
240F 23LBF 2620RPM 3 FILE: 077240

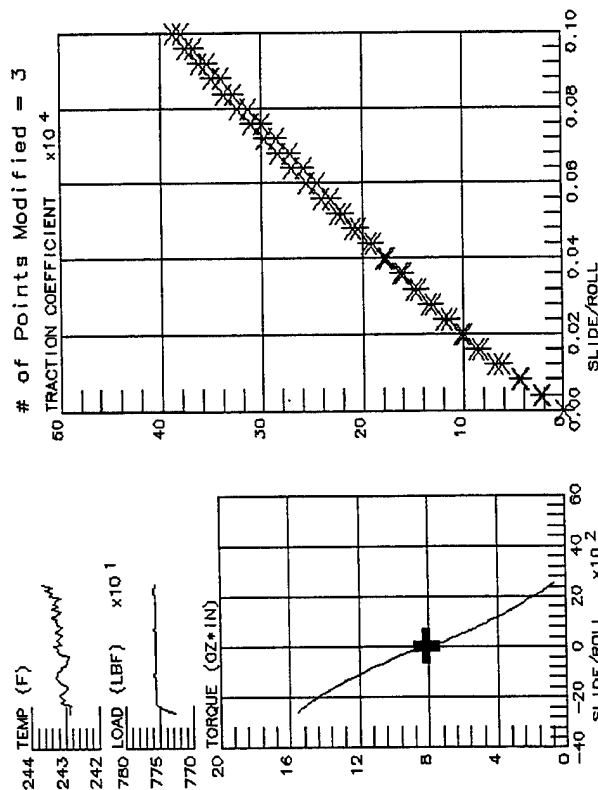


AI 85-42 PropLab #079-16 MIL-L-7808 #84
240F 50LBF 2620RPM 4 FILE: 077240



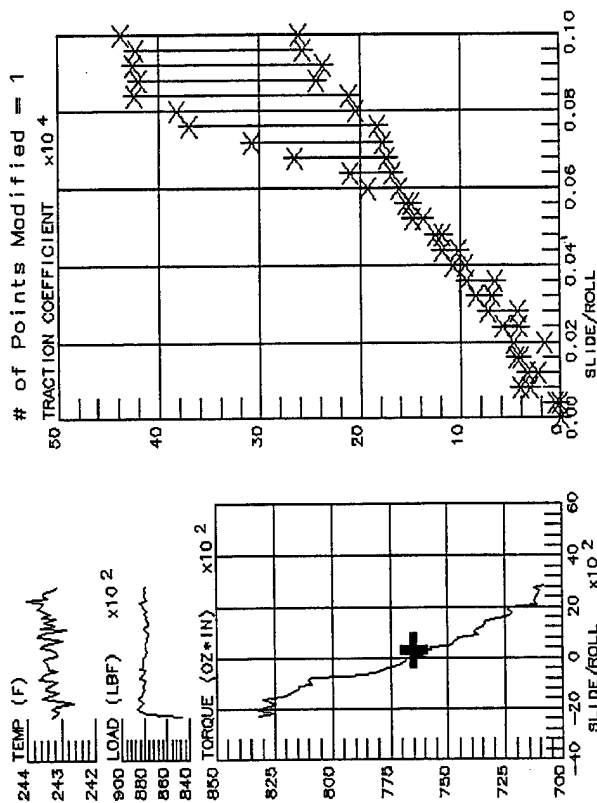
AI 85-42 Proplab #079-16 MIL-L-7808 #85
240F 77LBF 2620RPM 5 FILE: 077240

of Points Modified = 3



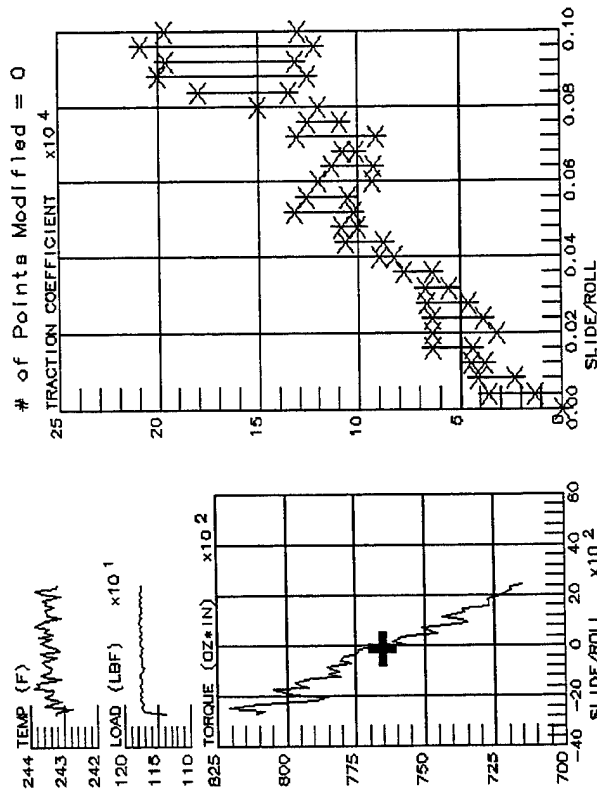
AI 85-42 Proplab #079-16 MIL-L-7808 #86
240F 8LBF 4880RPM 6 FILE: 077240

of Points Modified = 1



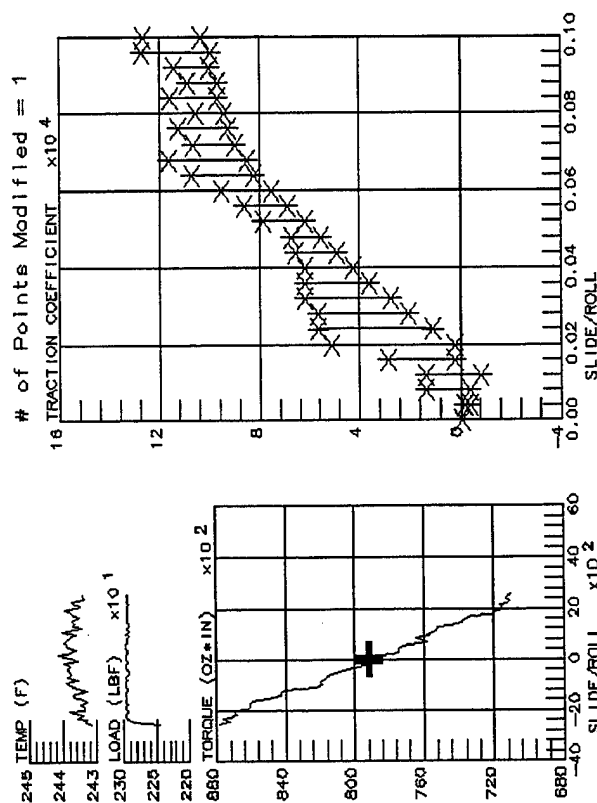
AI 85-42 Proplab #079-16 MIL-L-7808 #87
240F 111LBF 4880RPM 7 FILE: 077240

of Points Modified = 0

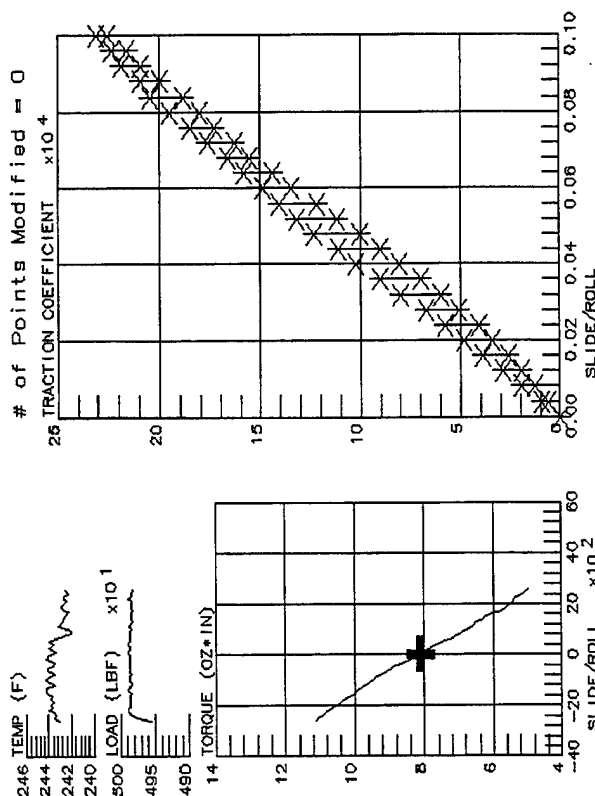


AI 85-42 Proplab #079-16 MIL-L-7808 #88
240F 23LBF 4880RPM 8 FILE: 077240

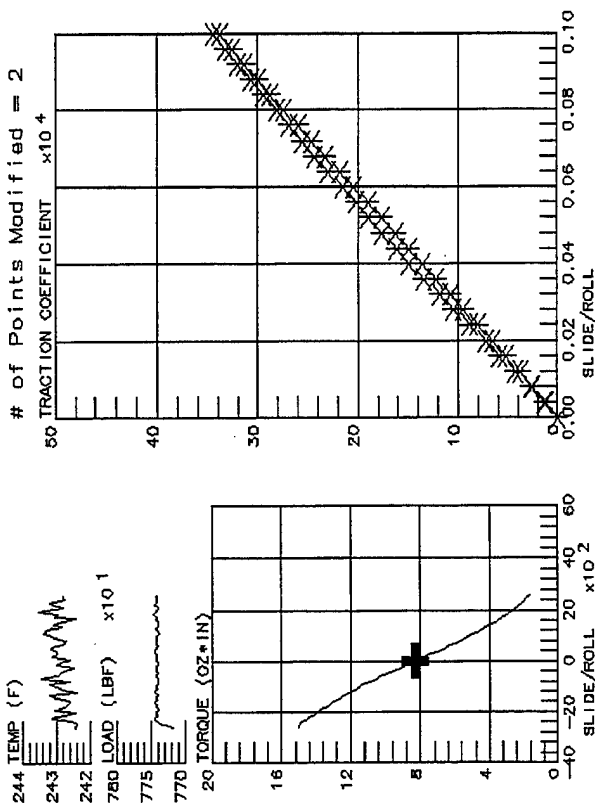
of Points Modified = 1



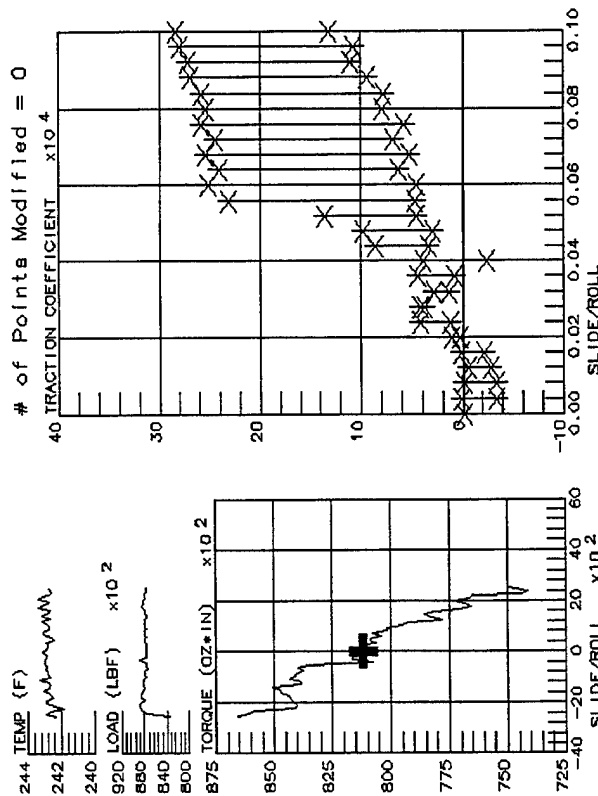
AI 85-42 Proplab #079-16 MIL-L-7808 #89
240F 50LBF 4880RPM 9 FILE: 077240



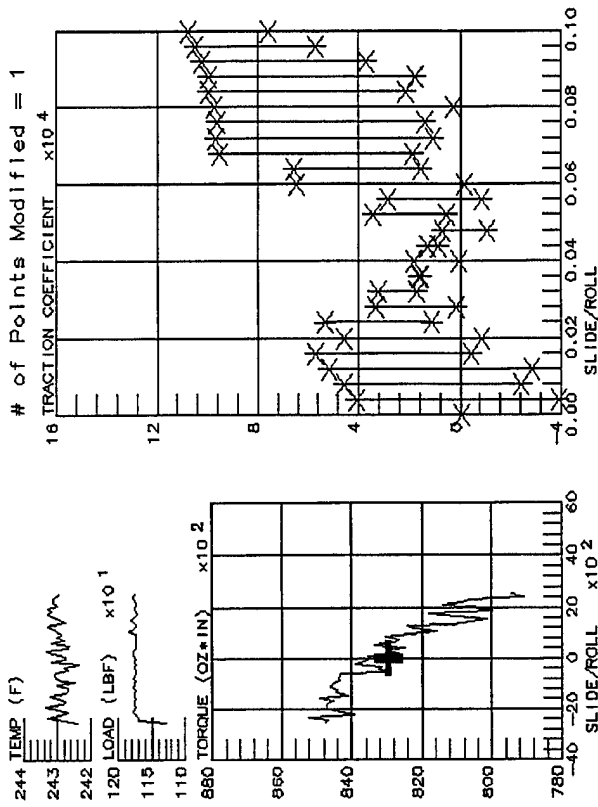
AI 85-42 Proplab #079-16 MIL-L-7808 #90
240F 77LBF 4880RPM 10 FILE: 077240



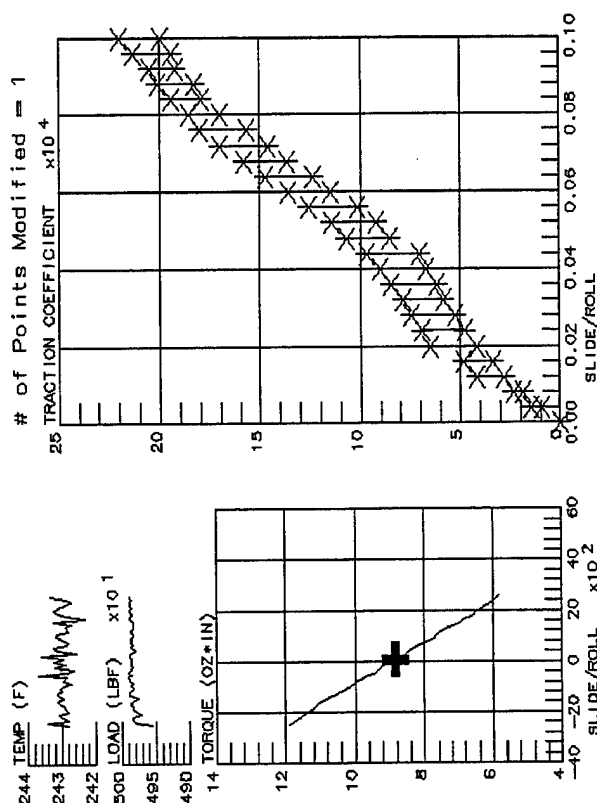
AI 85-42 Proplab #079-16 MIL-L-7808 #91
240F 81LBF 7050RPM 11 FILE: 077240



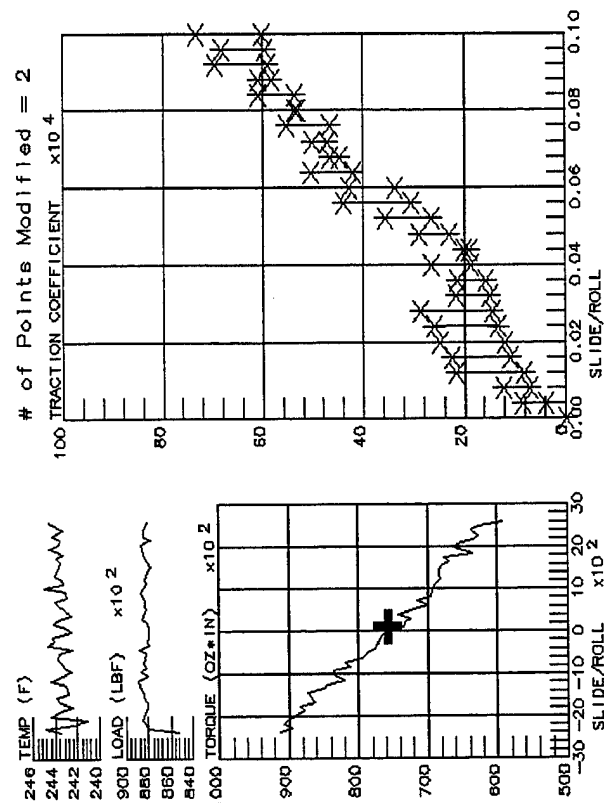
AI 85-42 Proplab #079-16 MIL-L-7808 #92
240F 111LBF 7050RPM 12 FILE: 077240



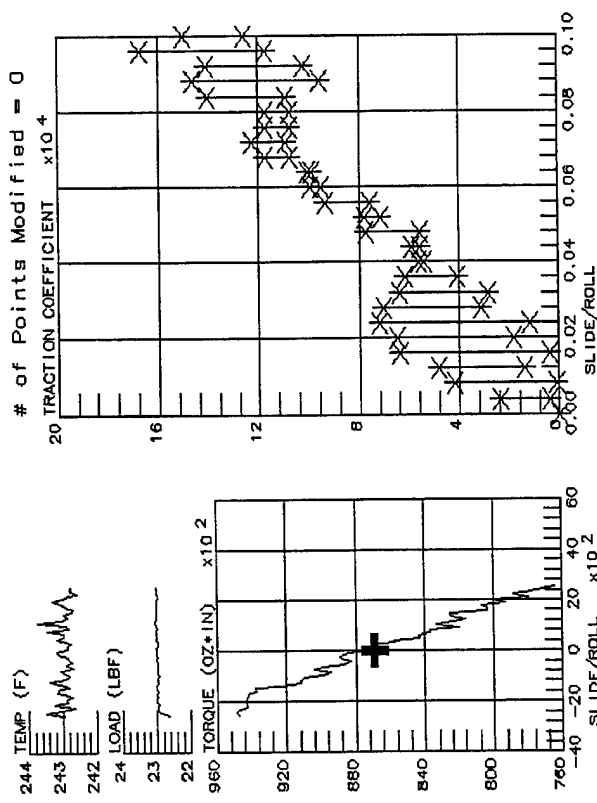
AI 85-42 PropLab #079-16 MIL-L-7808 #94
240F 60LBF 7050RPM 14 FILE: 077240



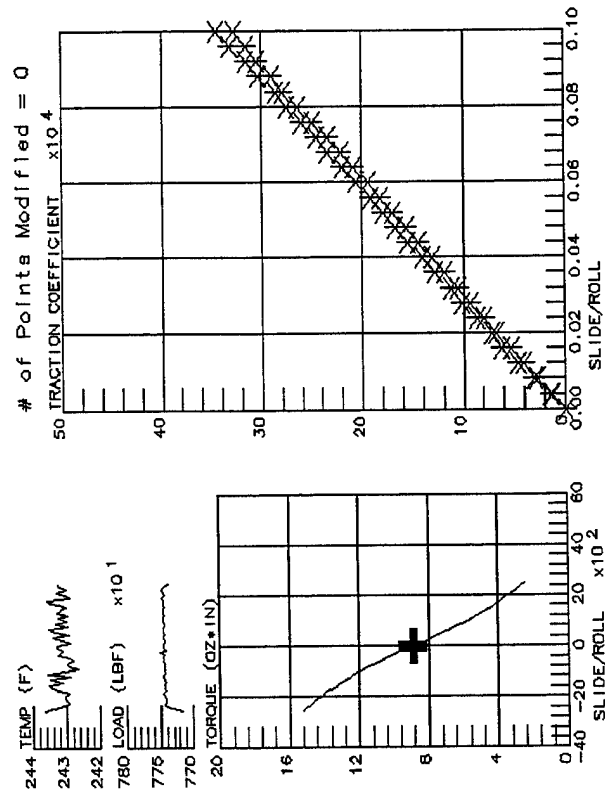
AI 85-42 ProLab #079-18 MIL-L-7808 #96
240F 8LBF 1060RPM 18 FILE: 077240

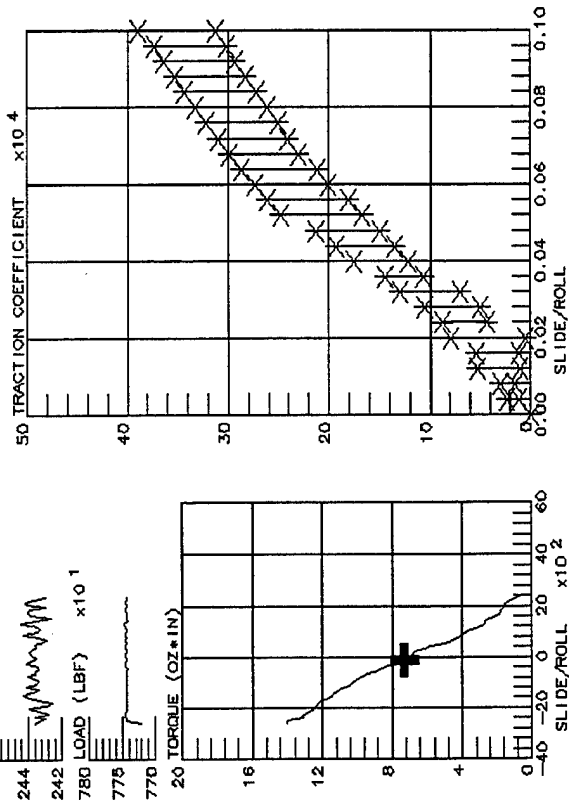
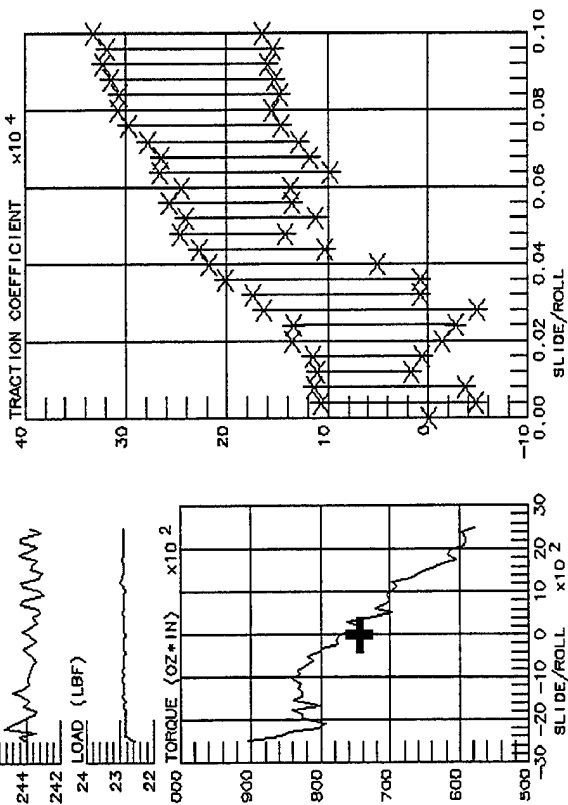


AI 85-42 PropLab #079-16 MIL-L-7808 #93
240F 23LBF 7050RPM 13 FILE: 077240



AI 85-42 PropLab #079-16 MIL-L-7808
240F 77LBF 7050RPM 15 FILE: 077240 #95





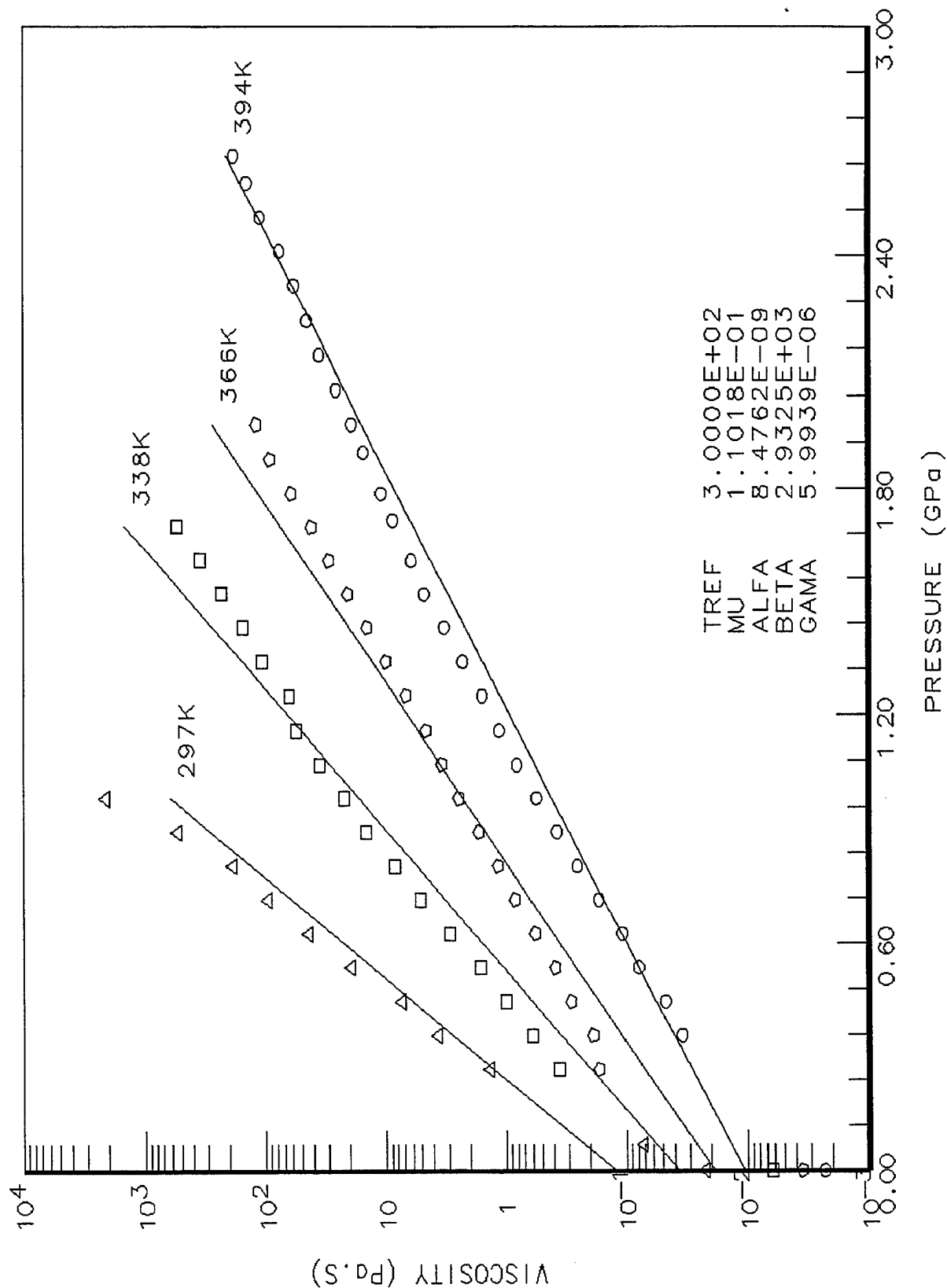
Lubricant name = AI 85-42 PropLab #79-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| ai1.dat | 2.9944E+02 | 5.2267E+00 | 5.6467E-01 | 5.2000E-09 | 6.7660E-02 |
| ai2.dat | 2.9944E+02 | 9.7352E+00 | 3.6319E-01 | 5.2000E-09 | 4.4096E-02 |
| ai3.dat | 2.9944E+02 | 1.4064E+01 | 2.4268E-01 | 5.2000E-09 | 4.2192E-02 |
| ai4.dat | 2.9944E+02 | 2.1146E+01 | 1.5258E-01 | 5.2000E-09 | 4.0224E-02 |
| ai5.dat | 3.2222E+02 | 5.2267E+00 | 1.8136E-01 | 5.2000E-09 | 6.2017E-02 |
| ai6.dat | 3.2222E+02 | 9.7352E+00 | 1.2885E-01 | 5.2000E-09 | 4.4216E-02 |
| ai7.dat | 3.2222E+02 | 1.4064E+01 | 8.8223E-02 | 5.2000E-09 | 3.3151E-02 |
| ai8.dat | 3.2222E+02 | 2.1146E+01 | 6.4734E-02 | 5.2000E-09 | 3.0114E-02 |
| ai9.dat | 3.4389E+02 | 5.2267E+00 | 7.7012E-02 | 5.2000E-09 | 4.1539E-02 |
| ai10.dat | 3.4389E+02 | 9.7352E+00 | 5.5537E-02 | 5.2000E-09 | 4.3620E-02 |
| ai11.dat | 3.4389E+02 | 1.4064E+01 | 4.3356E-02 | 5.2000E-09 | 2.9351E-02 |
| ai12.dat | 3.4389E+02 | 2.1146E+01 | 4.0220E-02 | 5.2000E-09 | 3.6677E-02 |
| ai13.dat | 3.6667E+02 | 5.2267E+00 | 5.0033E-02 | 5.2000E-09 | 1.9730E-01 |
| ai14.dat | 3.6667E+02 | 9.7352E+00 | 2.6551E-02 | 5.2000E-09 | 3.3176E-02 |
| ai15.dat | 3.6667E+02 | 1.4064E+01 | 2.1309E-02 | 5.2000E-09 | 3.5267E-02 |
| ai16.dat | 3.6667E+02 | 2.1146E+01 | 2.1472E-02 | 5.2000E-09 | 5.3240E-02 |
| ai17.dat | 3.8889E+02 | 5.2267E+00 | 4.8146E-02 | 5.2000E-09 | 4.1650E-01 |
| ai18.dat | 3.8889E+02 | 9.7352E+00 | 1.5616E-02 | 5.2000E-09 | 5.9221E-02 |
| ai19.dat | 3.8889E+02 | 1.4064E+01 | 1.1311E-02 | 5.2000E-09 | 1.6477E-02 |
| ai20.dat | 3.8889E+02 | 2.1146E+01 | 1.3180E-02 | 5.2000E-09 | 7.3631E-02 |

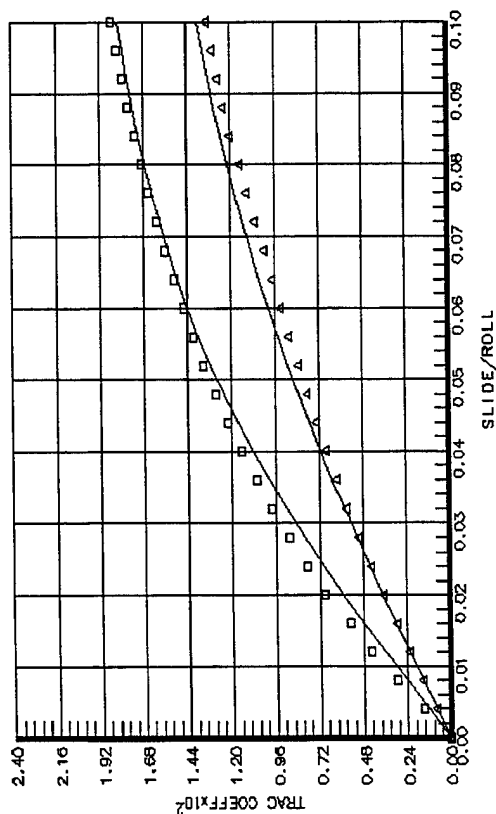
MIL-L-7808 Lubricant

Viscosity Model Type 2



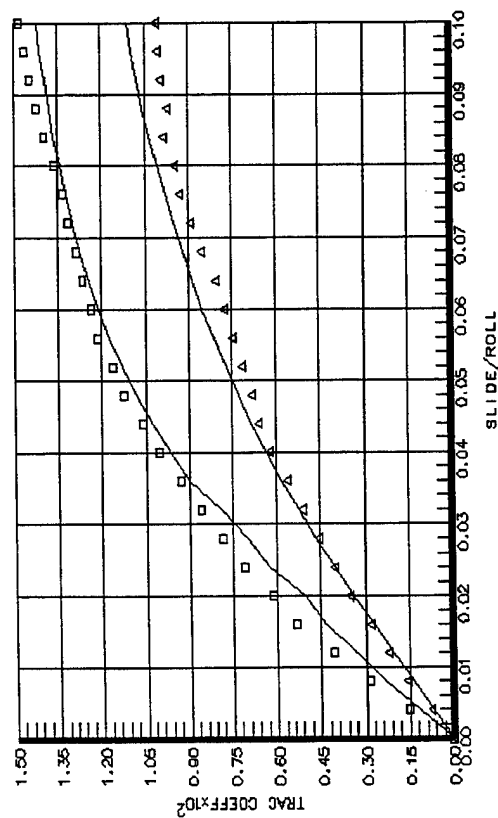
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1
 Δ 883MPA 222N 5.23M/S 299K # 4 5.847E-01 5.200E-09 6.786E-02 BETA*
 □ 1019MPA 342N 5.23M/S 299K # 5 5.847E-01 5.200E-09 6.786E-02



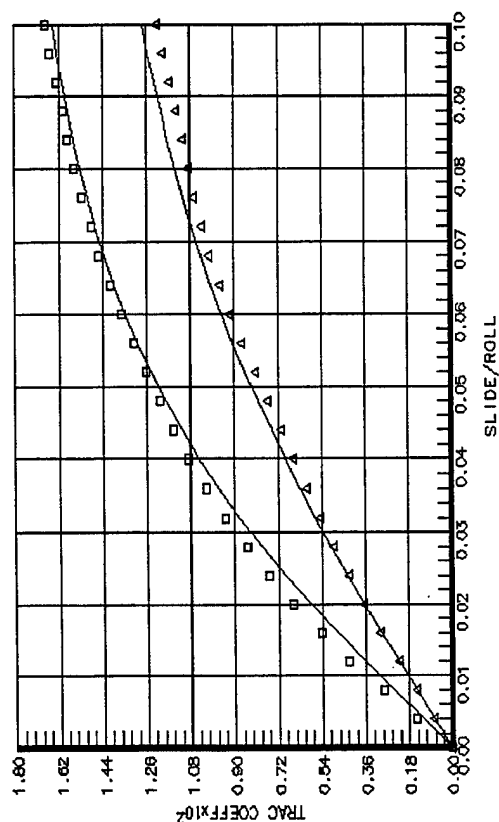
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1
 Δ 883MPA 222N 14.06M/S 299K # 14 2.427E-01 5.200E-09 4.219E-02 BETA*
 □ 1018MPA 342N 14.06M/S 299K # 15 2.427E-01 5.200E-09 4.219E-02



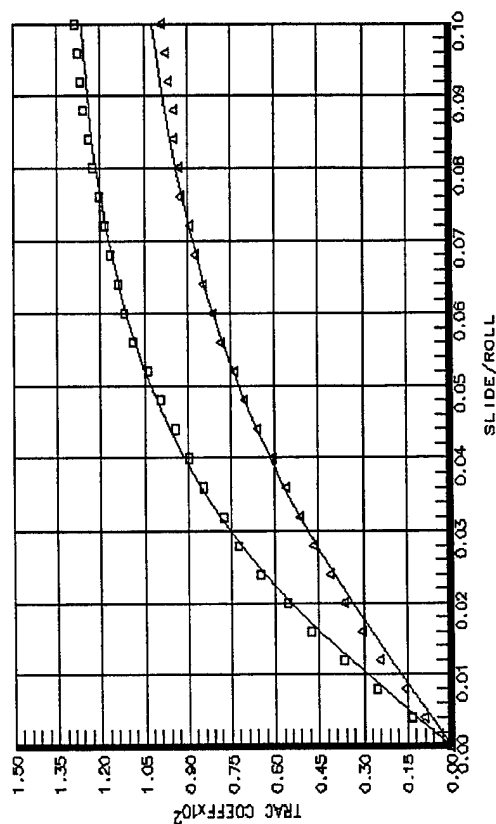
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1
 Δ 883MPA 222N 9.74M/S 299K # 9 3.632E-01 5.200E-09 4.410E-02 BETA*
 □ 1019MPA 342N 9.74M/S 299K # 10 3.632E-01 5.200E-09 4.410E-02



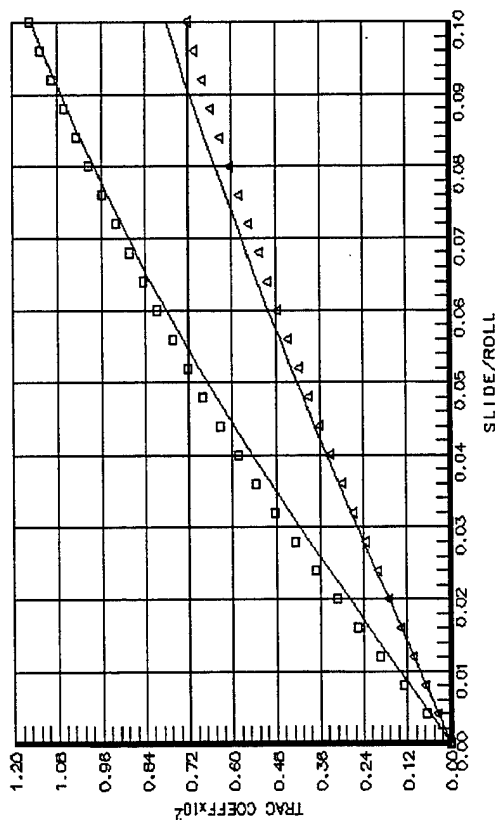
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1
 Δ 883MPA 222N 21.15M/S 299K # 19 1.526E-01 5.200E-09 4.022E-02 BETA*
 □ 1019MPA 342N 21.15M/S 299K # 20 1.526E-01 5.200E-09 4.022E-02



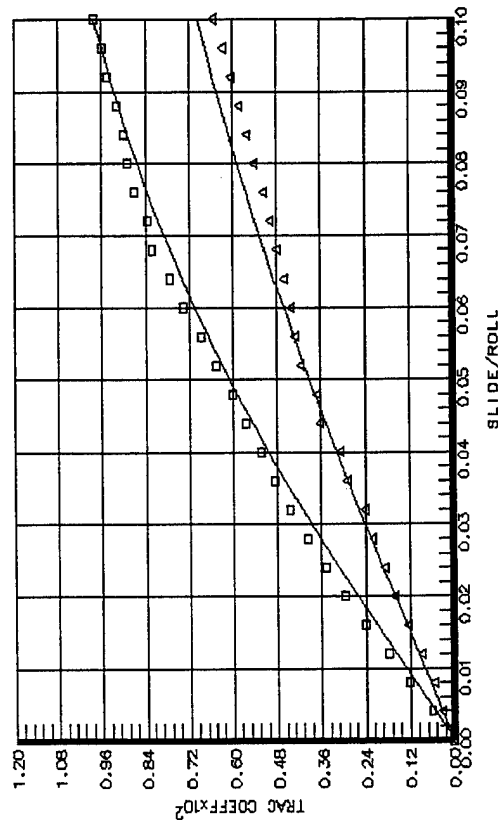
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{16}.dat$ μ_{16} ALFA* BETA*
 222N 5.23M/S 322K # 24 1.814E-01 5.200E-09 5.202E-02
 342N 5.23M/S 322K # 25 1.814E-01 5.200E-09 5.202E-02



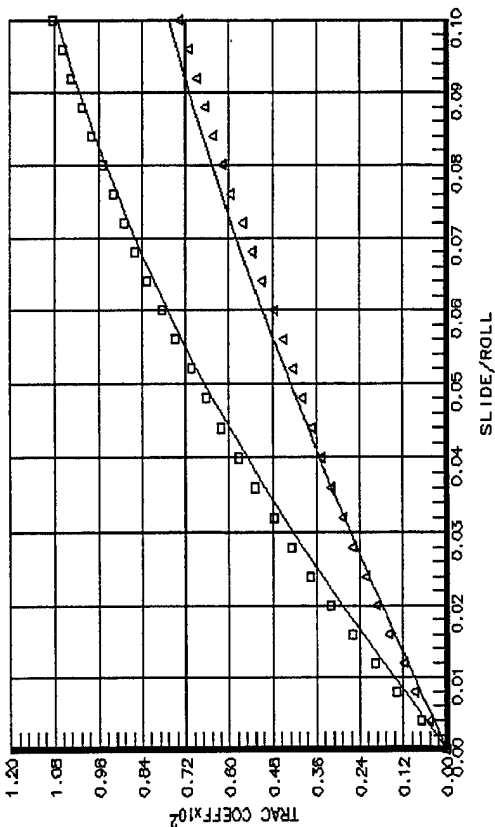
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{17}.dat$ μ_{17} ALFA* BETA*
 222N 14.08M/S 322K # 34 8.822E-02 5.200E-09 3.315E-02
 342N 14.08M/S 322K # 35 8.822E-02 5.200E-09 3.315E-02



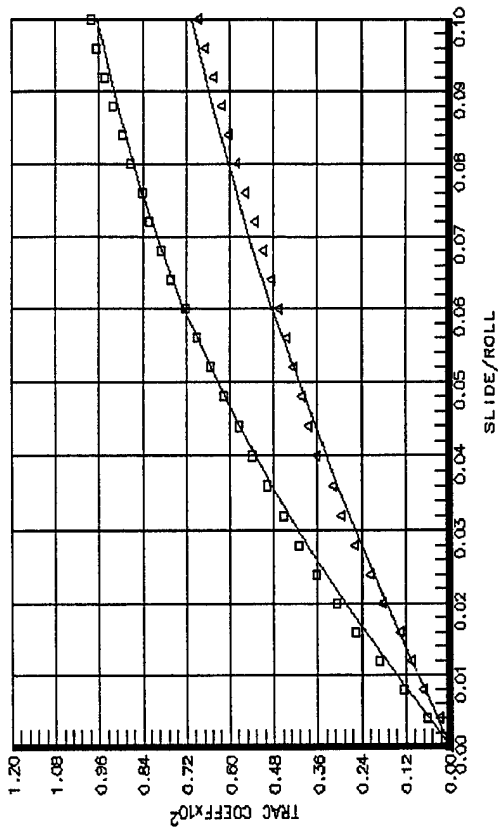
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{18}.dat$ μ_{18} ALFA* BETA*
 222N 9.74M/S 322K # 28 1.288E-01 5.200E-09 4.422E-02
 342N 9.74M/S 322K # 30 1.288E-01 5.200E-09 4.422E-02



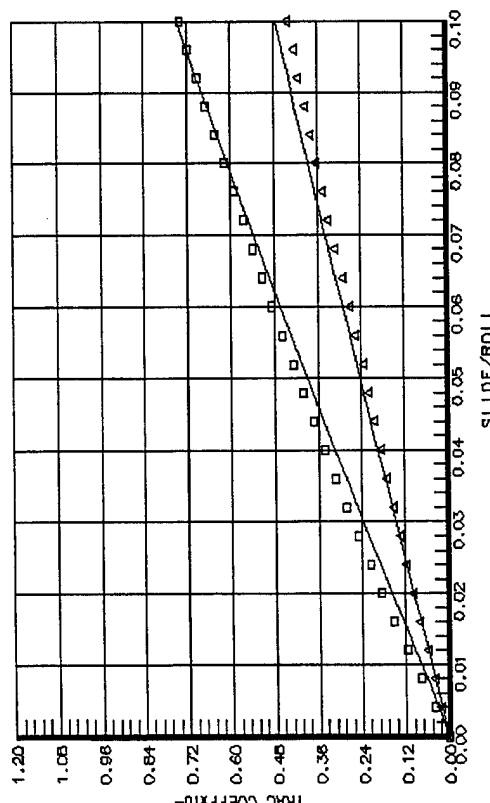
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{18}.dat$ μ_{18} ALFA* BETA*
 222N 21.15M/S 322K # 38 6.473E-02 5.200E-09 3.011E-02
 342N 21.15M/S 322K # 40 6.473E-02 5.200E-09 3.011E-02



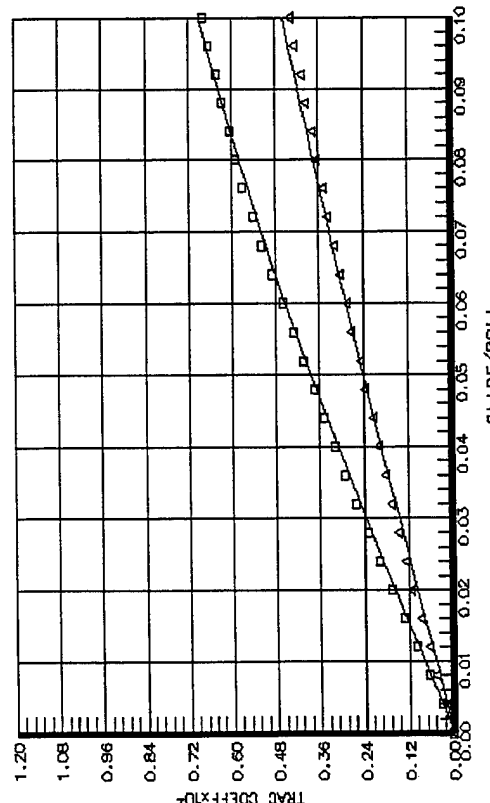
AI 85-42 Proplab #079-16 MIL-L-7808
NEWTONIAN MODEL TYPE 1

ALPHA* BETA*
XMU* 7.701E-02 5.200E-09 4.164E-02
222N 8.23M/S 344K # 44 7.701E-02 5.200E-09 4.164E-02
342N 8.23M/S 344K # 45 7.701E-02 5.200E-09 4.164E-02
878MPA 222N
1014MPA 342N



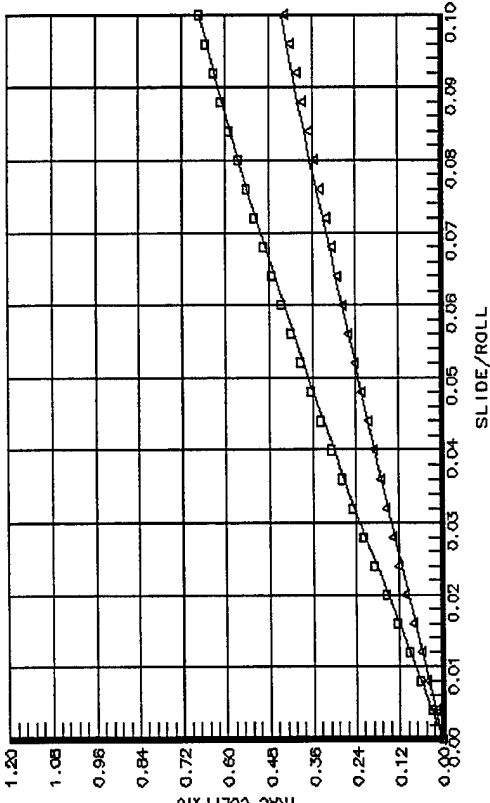
AI 85-42 Proplab #079-16 MIL-L-7808
NEWTONIAN MODEL TYPE 1

ALPHA* BETA*
XMU* 4.336E-02 5.200E-09 2.935E-02
222N 14.08M/S 344K # 54 4.336E-02 5.200E-09 2.935E-02
342N 14.08M/S 344K # 55 4.336E-02 5.200E-09 2.935E-02
878MPA 222N
1014MPA 342N



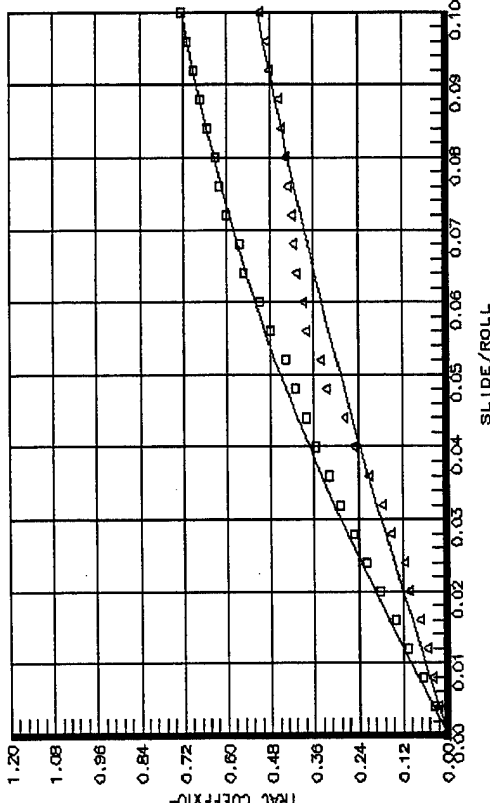
AI 85-42 Proplab #079-16 MIL-L-7808
NEWTONIAN MODEL TYPE 1

ALPHA* BETA*
XMU* 9.74M/S 344K # 49 5.554E-02 5.200E-09 4.362E-02
222N 9.74M/S 344K # 50 5.554E-02 5.200E-09 4.362E-02
342N 9.74M/S 344K # 50 5.554E-02 5.200E-09 4.362E-02
878MPA 222N
1014MPA 342N



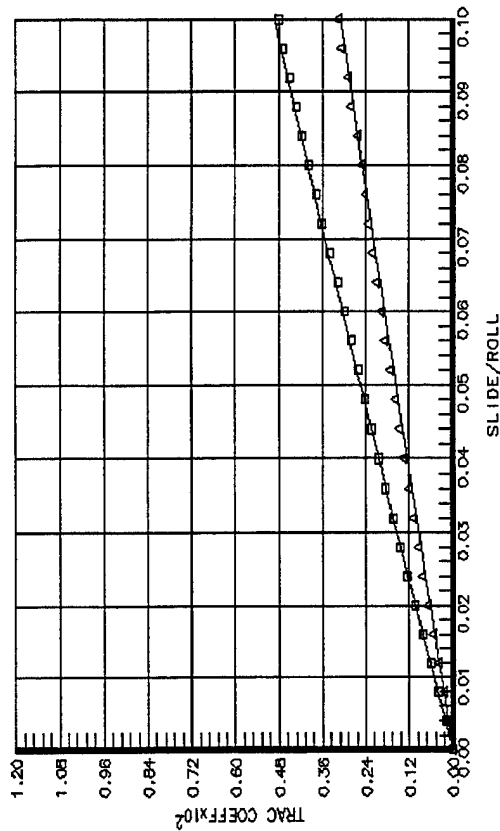
AI 85-42 Proplab #079-16 MIL-L-7808
NEWTONIAN MODEL TYPE 1

ALPHA* BETA*
XMU* 21.15M/S 344K # 58 4.022E-02 5.200E-09 3.688E-02
222N 21.15M/S 344K # 60 4.022E-02 5.200E-09 3.688E-02
342N 21.15M/S 344K # 60 4.022E-02 5.200E-09 3.688E-02
878MPA 222N
1014MPA 342N



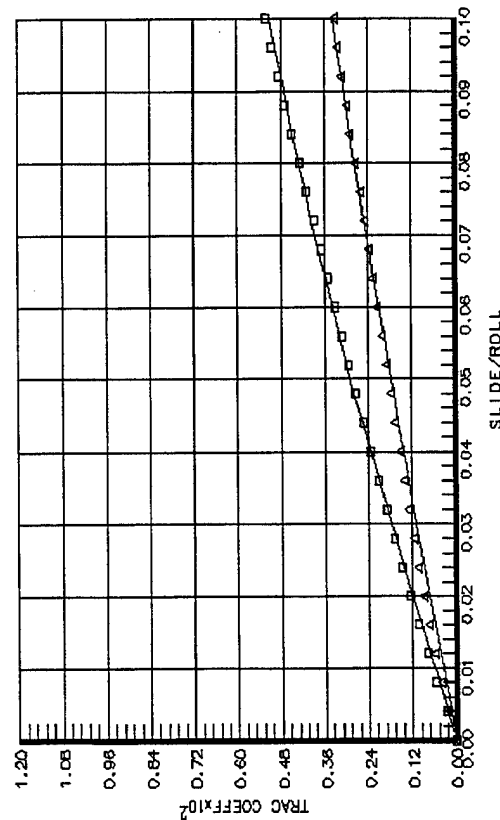
AI 85-42 PropLab #079-16 MIL-L-7808

| NEWTONIAN MODEL | | TYPE 1 | | a114.dat | | XMU* | | ALFA* | | BETA* | |
|-----------------|---------|--------|---------|----------|------|-----------|-----------|-----------|--|-------|--|
| Δ | 877MFA | 222N | 9.74M/S | 367K | # 69 | 2.855E-02 | 5.200E-09 | 3.318E-02 | | | |
| □ | 1015MFA | 342N | 9.74M/S | 367K | # 70 | 2.835E-02 | 5.200E-09 | 3.318E-02 | | | |



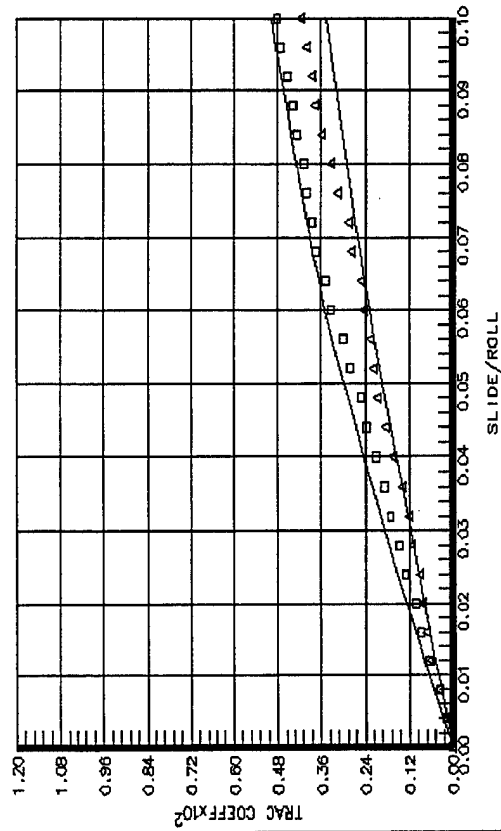
AI 85-42 ProLab #079-16 MIL-L-7808

| NEWTONIAN MODEL | | TYPE 1 | | all3.dat | | ALFA* | | BETA* | |
|-----------------|---------|--------|---------|----------|------|-----------|-----------|-----------|--|
| | | | | | | | | | |
| Δ | 877NPA | 222N | 5.23M/S | 367K | # 54 | 5.003E-02 | 5.200E-09 | 1.873E-01 | |
| Δ | 1015NPA | 342N | 5.23M/S | 367K | # 66 | 5.003E-02 | 5.200E-09 | 1.973E-01 | |



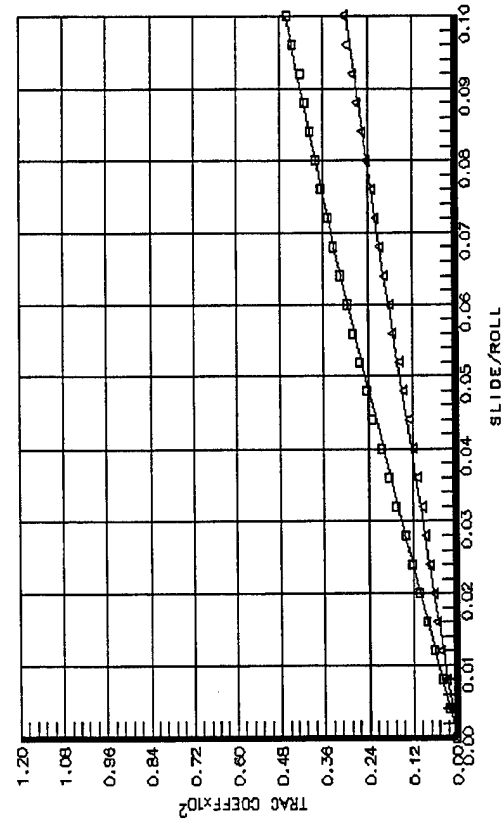
AI 85-42 PropLab #079-16 MIL-L-7808

| NEWTONIAN MODEL | TYPE 1 | all0.dat | XMU* | ALFA* | BETA* | | |
|-----------------|--------|----------|------|-------|-----------|-----------|-----------|
| Δ 87BMPA | 222N | 21.15M/S | 367K | # 79 | 2.147E-02 | 5.200E-09 | 5.324E-02 |
| □ 1016MPA | 342N | 21.15M/S | 367K | # 80 | 2.147E-02 | 5.200E-09 | 5.324E-02 |



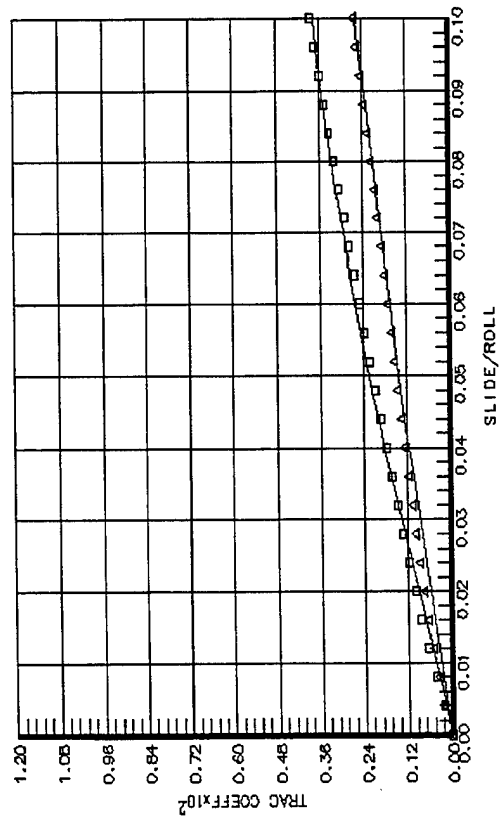
AT 85-42 PronLab #079-16 MIL-L-7808

| AI | 03-42 | FIOPLAD #07000 | MILL L 1000 | TYPE 1 | at16.dat | XMU* | ALFA* | BETA* |
|-----------|-------|----------------|-------------|-----------|-----------|-----------|-------|-------|
| NEWTONIAN | | | | | | | | |
| 877MPA | 222N | 14.08M/\$ 367K | # 74 | 2.131E-02 | 5.200E-09 | 3.527E-02 | | |
| 1015MPa | 342N | 14.08M/\$ 367K | # 75 | 2.131E-02 | 5.200E-09 | 3.527E-02 | | |



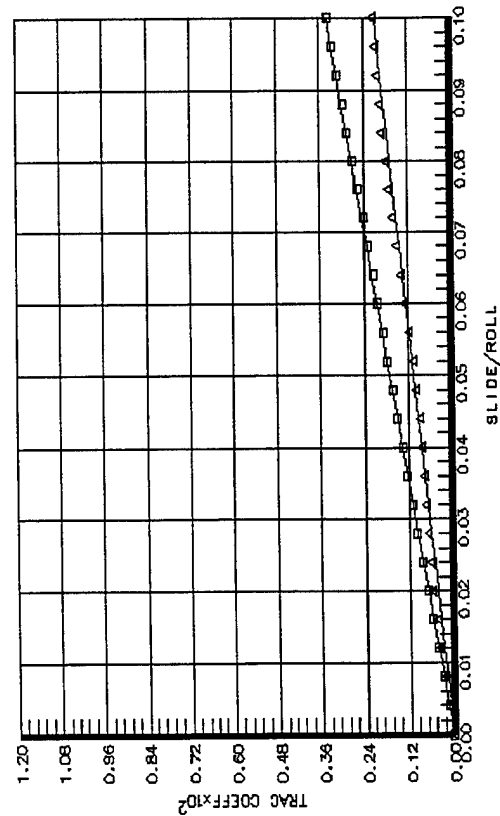
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{117}.dat$ XMU^* $ALFA^*$ $BETA^*$
 Δ 875MPa 222N 5.23M/S 389K # 84 4.815E-02 5.200E-09 4.185E-01
 \square 1013MPa 342N 5.23M/S 389K # 85 4.815E-02 5.200E-09 4.185E-01



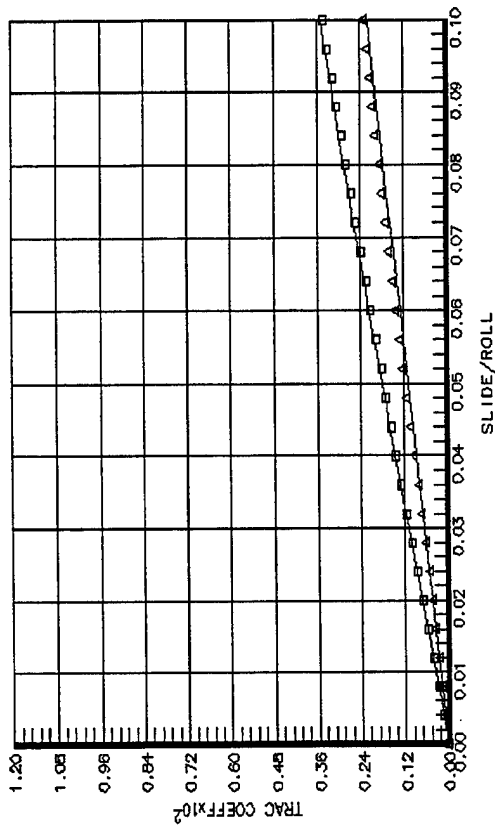
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{119}.dat$ XMU^* $ALFA^*$ $BETA^*$
 Δ 875MPa 222N 14.08M/S 389K # 94 1.131E-02 5.200E-09 1.648E-02
 \square 1013MPa 342N 14.08M/S 389K # 95 1.131E-02 5.200E-09 1.648E-02



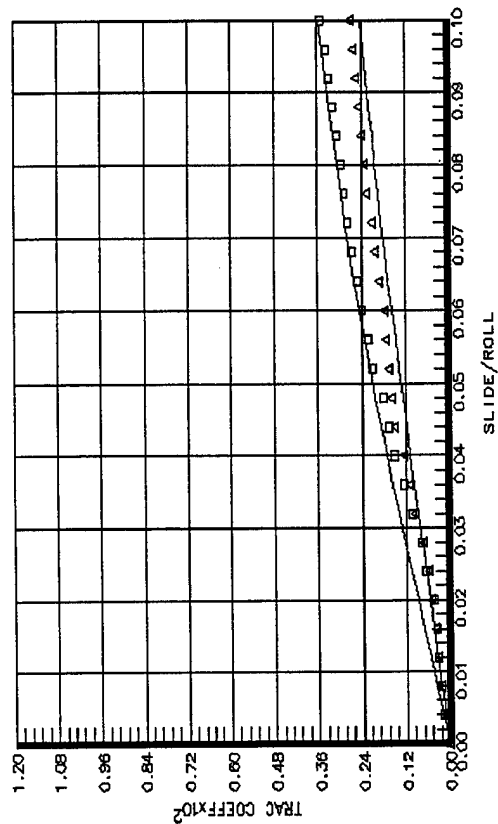
AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{118}.dat$ XMU^* $ALFA^*$ $BETA^*$
 Δ 875MPa 222N 9.74M/S 389K # 88 1.562E-02 5.200E-09 5.922E-02
 \square 1013MPa 342N 9.74M/S 389K # 90 1.562E-02 5.200E-09 5.922E-02



AI 85-42 Proplab #079-16 MIL-L-7808

NEWTONIAN MODEL TYPE 1 $a_{120}.dat$ XMU^* $ALFA^*$ $BETA^*$
 Δ 875MPa 222N 21.15M/S 389K # 98 1.318E-02 5.200E-09 7.383E-02
 \square 1013MPa 342N 21.15M/S 389K # 100 1.318E-02 5.200E-09 7.383E-02



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3. Traction Data Set B: RL-714 Mobil Base Oil

Data set name: AC RL-714 Mobil 28 base oil
 Rolling radii [Disks 1 & 2] (in): 0.54 0.54
 Crown radii [Disks 1 & 2] (in): 35.10 43.90

Number of data sets found = 48

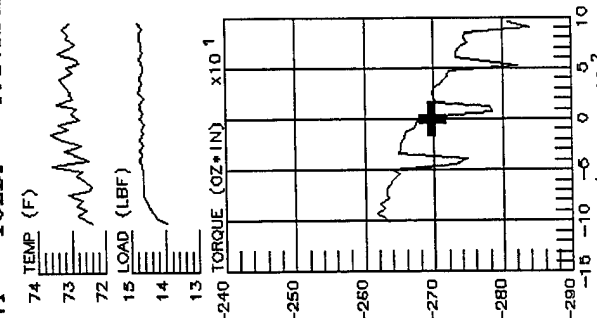
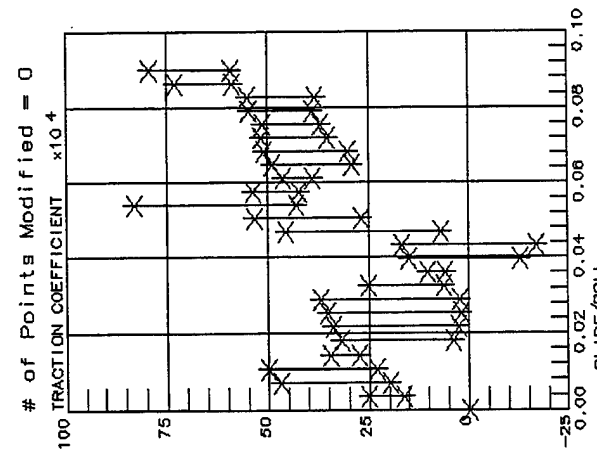
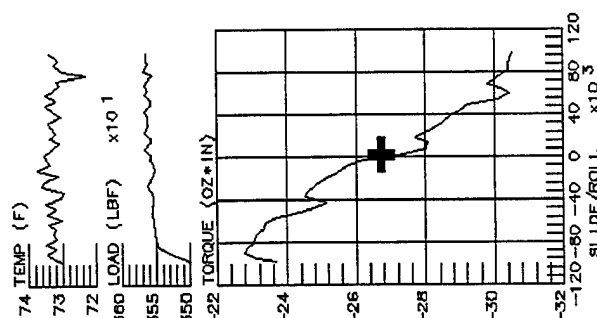
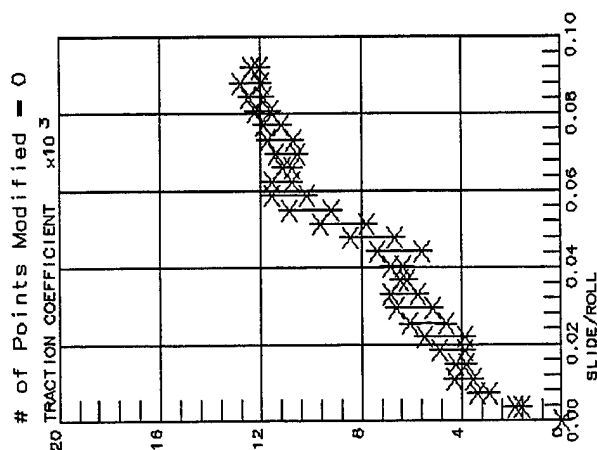
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Points | Dataset/Test # |
|----|-----------|-------------|---------|---------|---------|--------|----------------|
| 1 | 77.00 | 13.42 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #1 |
| 2 | 77.00 | 34.72 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #2 |
| 3 | 77.00 | 68.80 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #3 |
| 4 | 77.00 | 120.63 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #4 |
| 5 | 77.00 | 13.42 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #5 |
| 6 | 77.00 | 34.72 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #6 |
| 7 | 77.00 | 68.80 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #7 |
| 8 | 77.00 | 120.63 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #8 |
| 9 | 77.00 | 13.42 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #9 |
| 10 | 77.00 | 34.72 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #10 |
| 11 | 77.00 | 68.80 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #11 |
| 12 | 77.00 | 120.63 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #12 |
| 13 | 104.00 | 13.42 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #13 |
| 14 | 104.00 | 34.72 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #14 |
| 15 | 104.00 | 68.80 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #15 |
| 16 | 104.00 | 120.63 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #16 |
| 17 | 104.00 | 13.42 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #17 |
| 18 | 104.00 | 34.72 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #18 |
| 19 | 104.00 | 68.80 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #19 |
| 20 | 104.00 | 120.63 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #20 |
| 21 | 104.00 | 13.42 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #21 |
| 22 | 104.00 | 34.72 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #22 |
| 23 | 104.00 | 68.80 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #23 |
| 24 | 104.00 | 120.63 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #24 |
| 25 | 131.00 | 13.42 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #25 |
| 26 | 131.00 | 34.72 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #26 |
| 27 | 131.00 | 68.80 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #27 |
| 28 | 131.00 | 120.63 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #28 |
| 29 | 131.00 | 13.42 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #29 |
| 30 | 131.00 | 34.72 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #30 |
| 31 | 131.00 | 68.80 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #31 |
| 32 | 131.00 | 120.63 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #32 |
| 33 | 131.00 | 13.42 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #33 |
| 34 | 131.00 | 34.72 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #34 |
| 35 | 131.00 | 68.80 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #35 |
| 36 | 131.00 | 120.63 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #36 |
| 37 | 200.00 | 13.42 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #37 |
| 38 | 200.00 | 34.72 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #38 |
| 39 | 200.00 | 68.80 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #39 |
| 40 | 200.00 | 120.63 | 4570.00 | 5050.00 | 4810.00 | 41 | m28ac #40 |
| 41 | 200.00 | 13.42 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #41 |
| 42 | 200.00 | 34.72 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #42 |
| 43 | 200.00 | 68.80 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #43 |
| 44 | 200.00 | 120.63 | 5370.00 | 6570.00 | 5970.00 | 41 | m28ac #44 |
| 45 | 200.00 | 13.42 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #45 |
| 46 | 200.00 | 34.72 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #46 |
| 47 | 200.00 | 68.80 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #47 |
| 48 | 200.00 | 120.63 | 6490.00 | 7930.00 | 7210.00 | 41 | m28ac #48 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|---------|-------------|
| ac1.dat | 77.00 | 4810.00 | 2 3 4 |
| ac2.dat | 77.00 | 5970.00 | 6 7 8 |
| ac3.dat | 77.00 | 7210.00 | 10 11 12 |
| ac4.dat | 104.00 | 4810.00 | 14 15 16 |
| ac5.dat | 104.00 | 5970.00 | 18 19 20 |
| ac6.dat | 104.00 | 7210.00 | 22 23 24 |
| ac7.dat | 131.00 | 4810.00 | 26 27 28 |
| ac8.dat | 131.00 | 5970.00 | 30 31 32 |
| ac9.dat | 131.00 | 7210.00 | 34 35 36 |
| ac10.dat | 200.00 | 4810.00 | 38 39 40 |
| ac11.dat | 200.00 | 5970.00 | 42 43 44 |
| ac12.dat | 200.00 | 7210.00 | 46 47 48 |

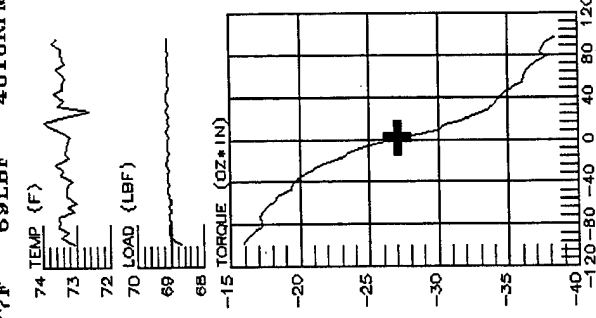
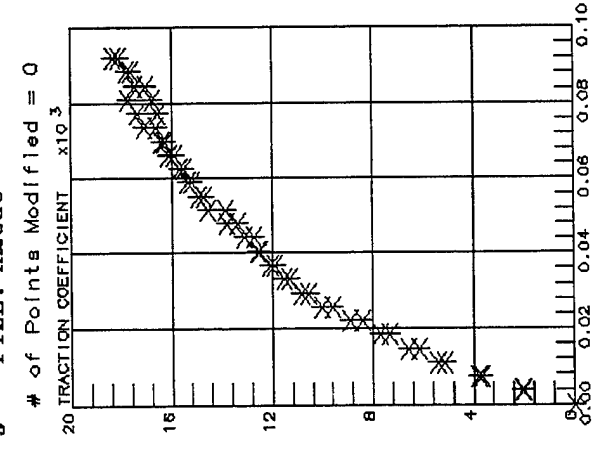
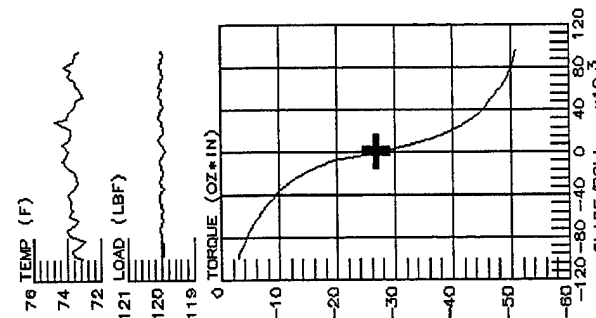
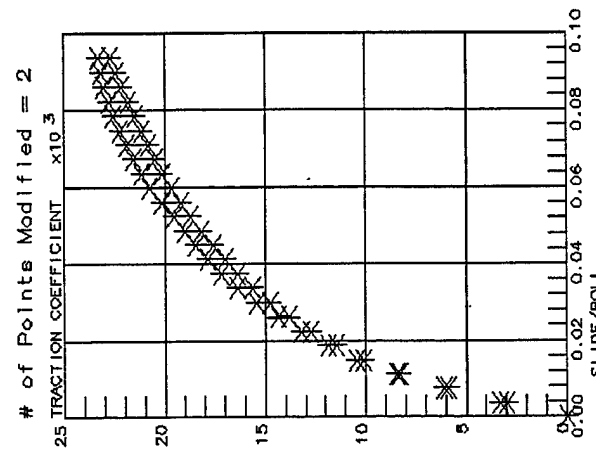
AC RL-714 Mobil 28 base oil
77F 35LBF 4810RPM 2 FILE: m28ao

AC RL-714 Mobil 28 base oil
77F 13LBF 4810RPM 1 FILE: m28ao



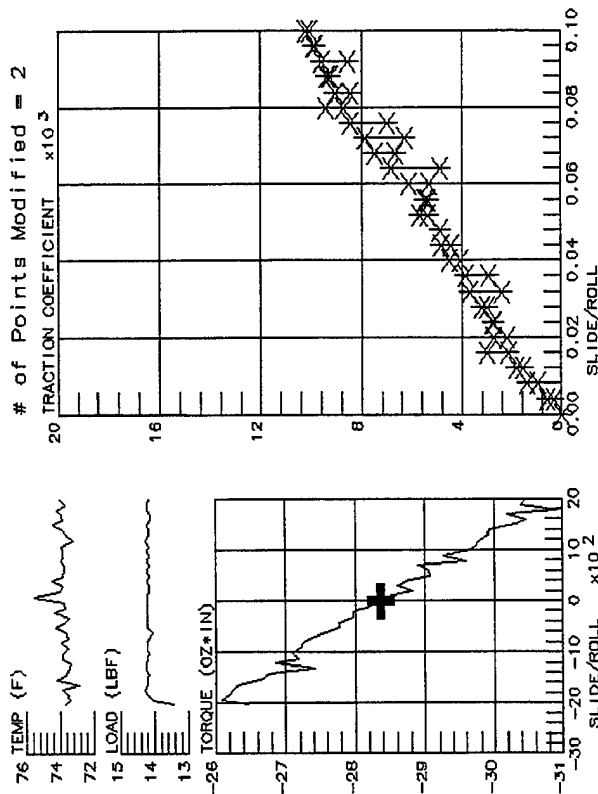
AC RL-714 Mobil 28 base oil
77F 121LBF 4810RPM 4 FILE: m28ac

AC RL-714 Mobil 28 base oil
77F 69LBF 4810RPM 3 FILE: m28ac



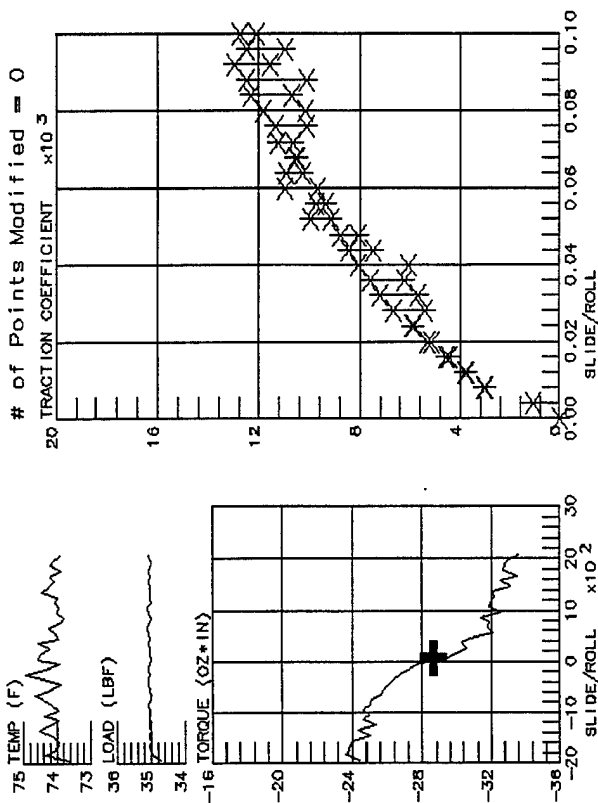
AC RL-714 Mobil 28 base oil #5
77F 13LBF 6970RPM 6 FILE: m28ac

of Points Modified = 2



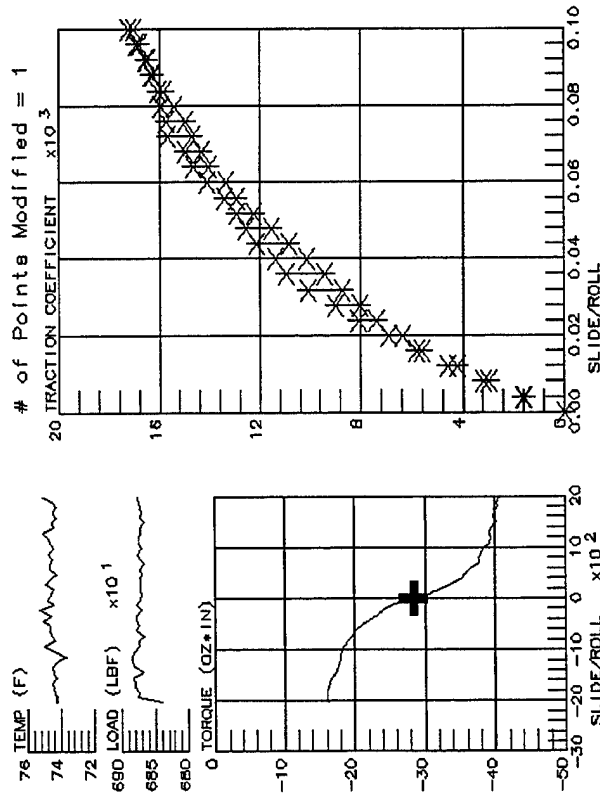
AC RL-714 Mobil 28 base oil #8
77F 36LBF 6970RPM 8 FILE: m28ao

of Points Modified = 0



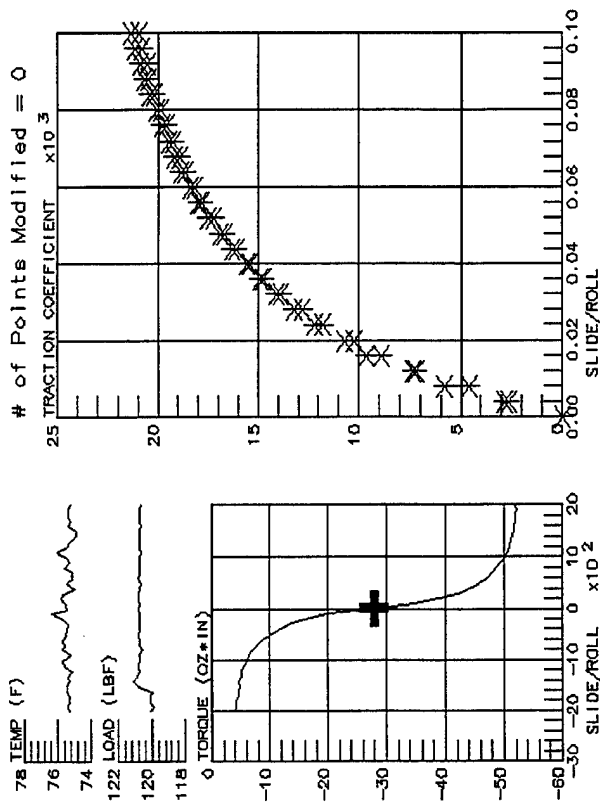
AC RL-714 Mobil 28 base oil #7
77F 69LBF 5970RPM 7 FILE: m28ac

of Points Modified = 1



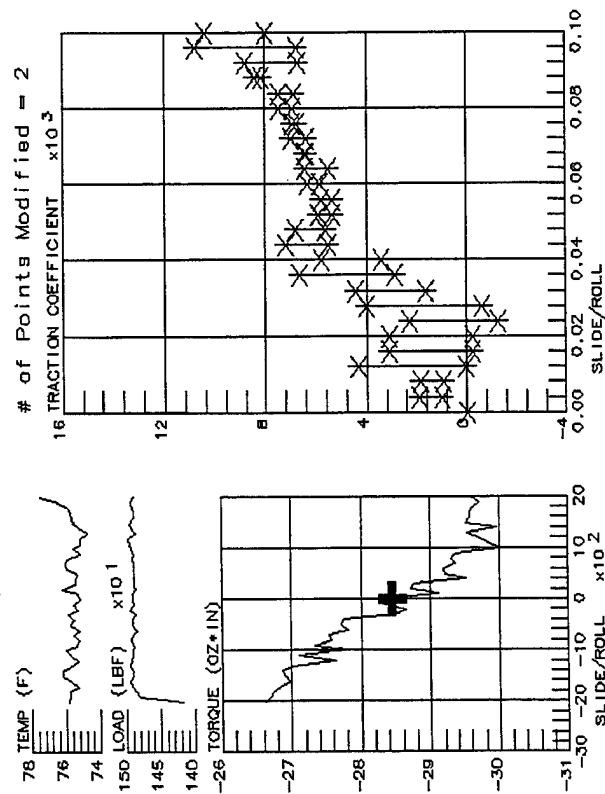
AC RL-714 Mobil 28 base oil #8
77F 121LBF 5970RPM 8 FILE: m28ac

of Points Modified = 0



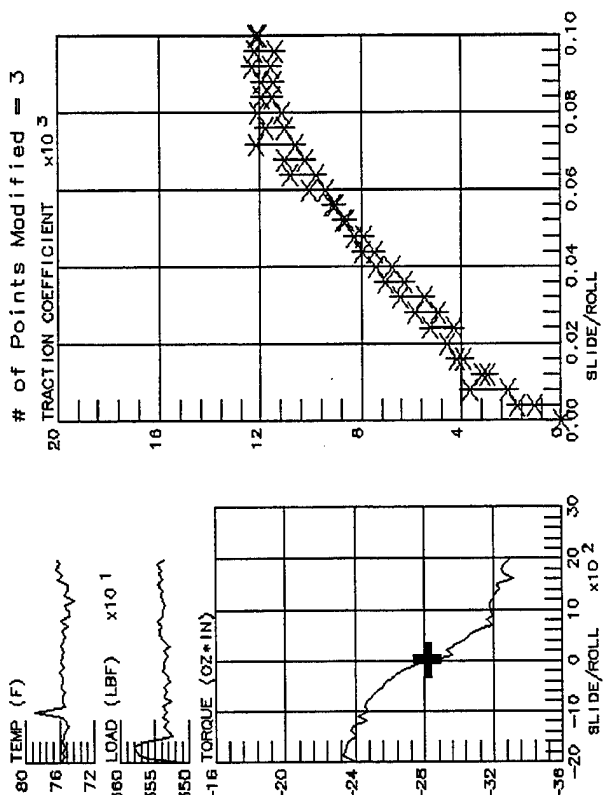
AC RL-714 Mobil 28 base oil
77F 13LBF 7210RPM 9 FILE: m28ao

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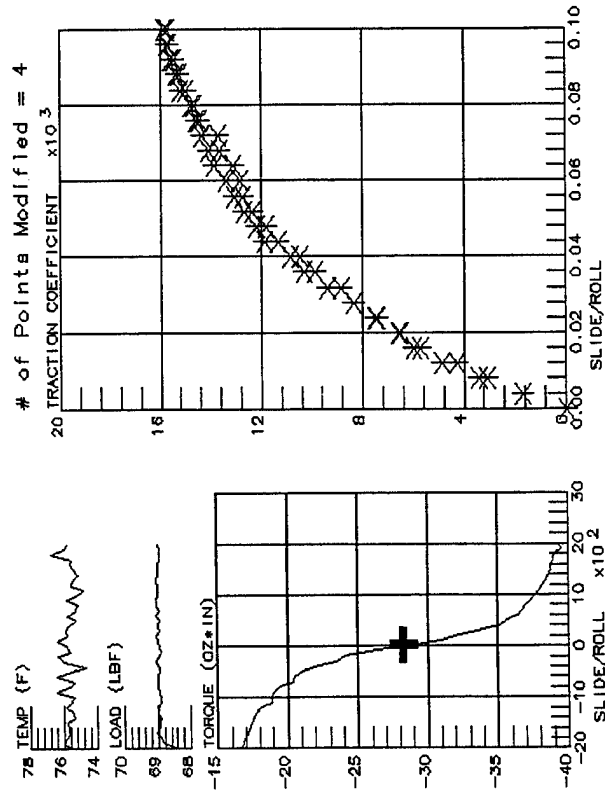
AC RL-714 Mobil 28 base oil
77F 36LBF 7210RPM 10 FILE: m28ao

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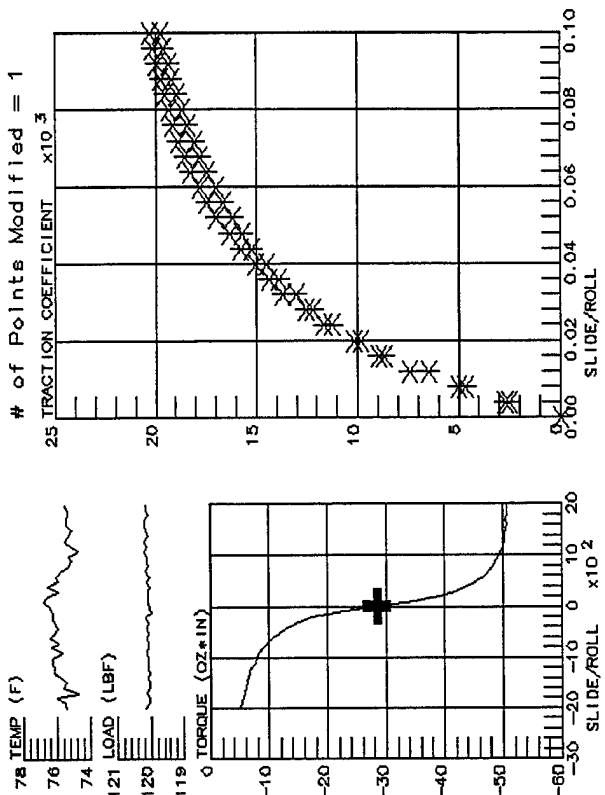
AC RL-714 Mobil 28 base oil
77F 69LBF 7210RPM 11 FILE: m28ao

of Points Modified = 4

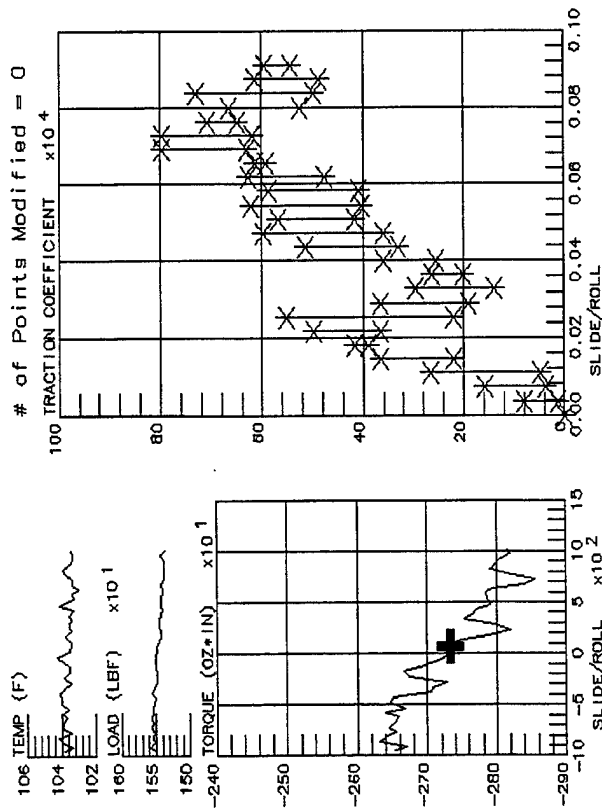


AC RL-714 Mobil 28 base oil
77F 121LBF 7210RPM 12 FILE: m28ao

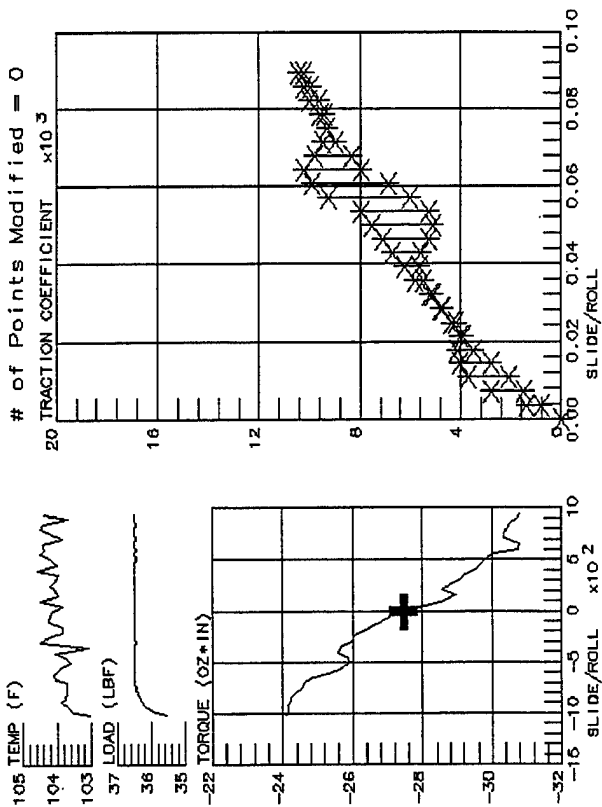
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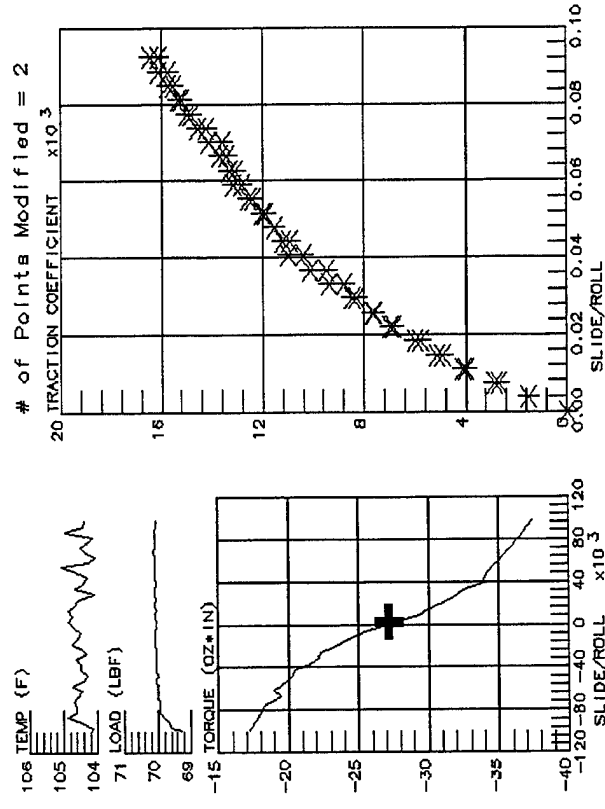
AC RL-714 Mobil 28 base oil #13
104F 13LBF 4810RPM 13 FILE: m28ao



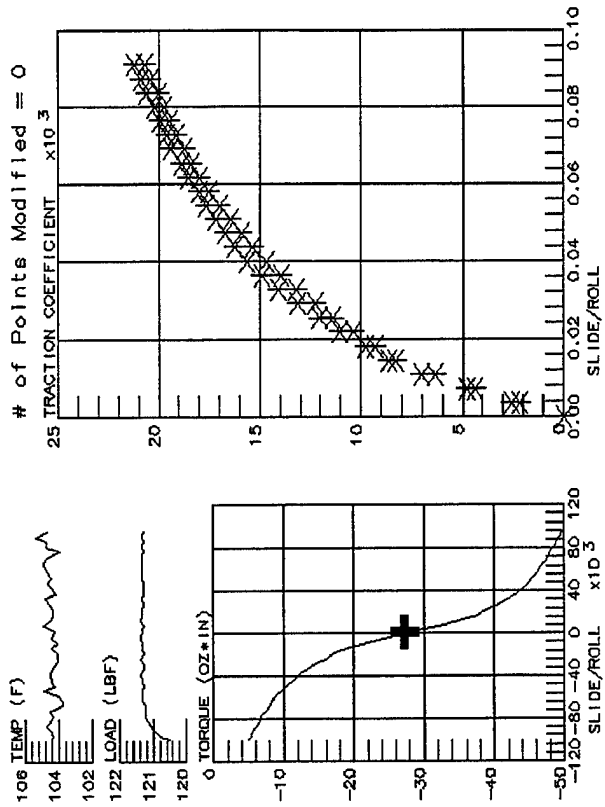
AC RL-714 Mobil 28 base oil #14
104F 35LBF 4810RPM 14 FILE: m28ao



AC RL-714 Mobil 28 base oil #15
104F 69LBF 4810RPM 15 FILE: m28ao



AC RL-714 Mobil 28 base oil #16
104F 121LBF 4810RPM 16 FILE: m28ac

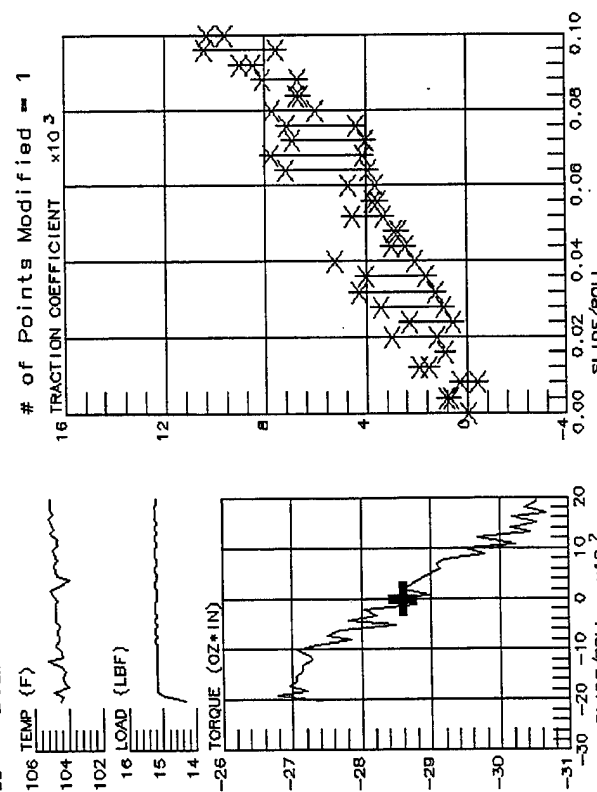
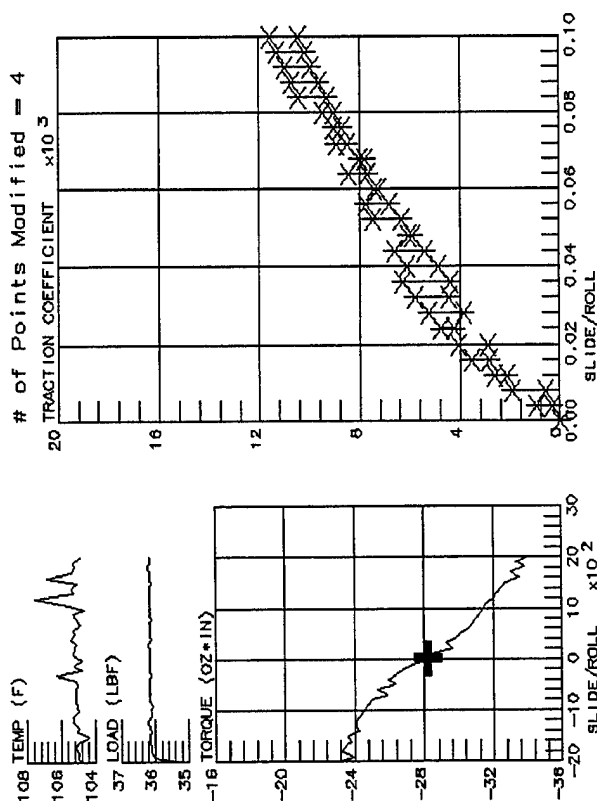


AC RL-714 Mobil 28 base oil #18
104F 35LBF 5970RPM 18 FILE: m28ac

AC RL-714 Mobil 28 base oil
104F 131RF 5970RPM 17 FILE: m28ao #17

of Points Modified = 4

of Paints Modified = 1

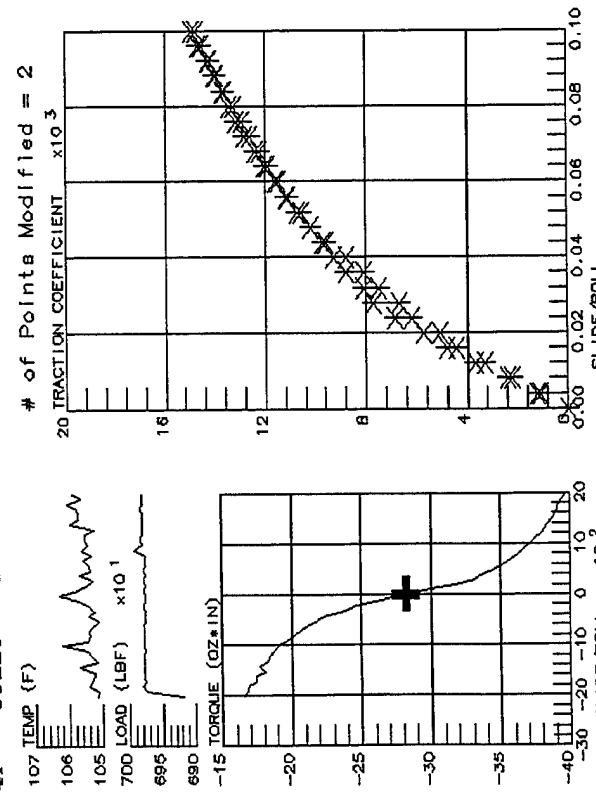
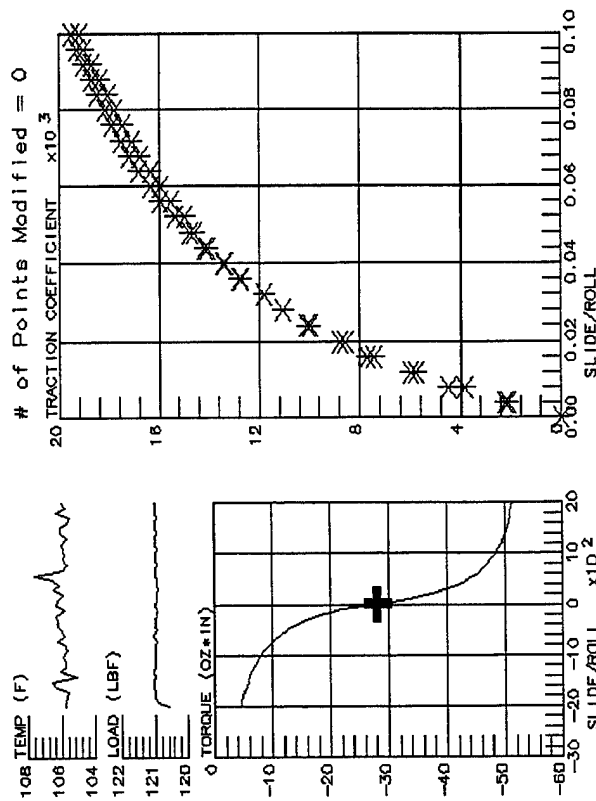


AC RL-714 Mobil 28 base oil
104F 121LBF 5970RPM 20 FILE: m28ac #20

AC RL-714 Mobil 28 base oil
104F 501BF 5920RPM 19 FILE: m28ac #19

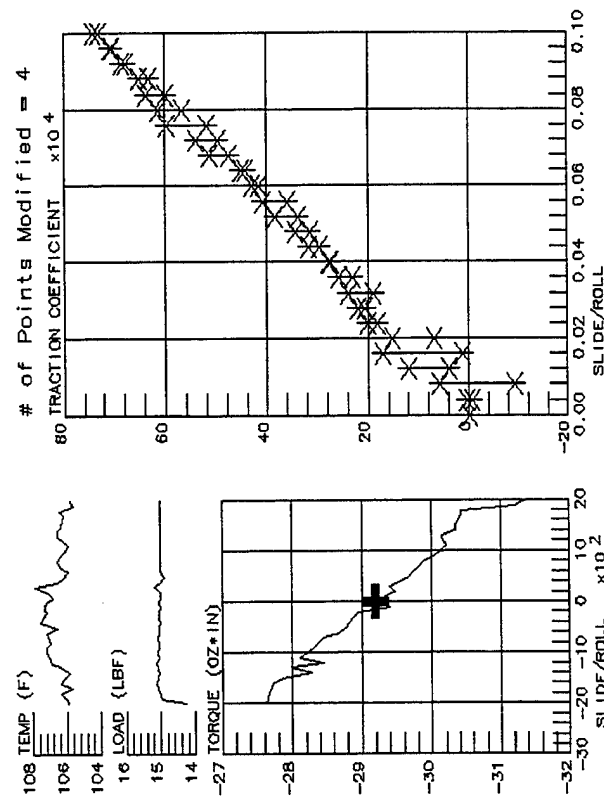
of Points Modified = 0

"of Delia's Modified" - 2



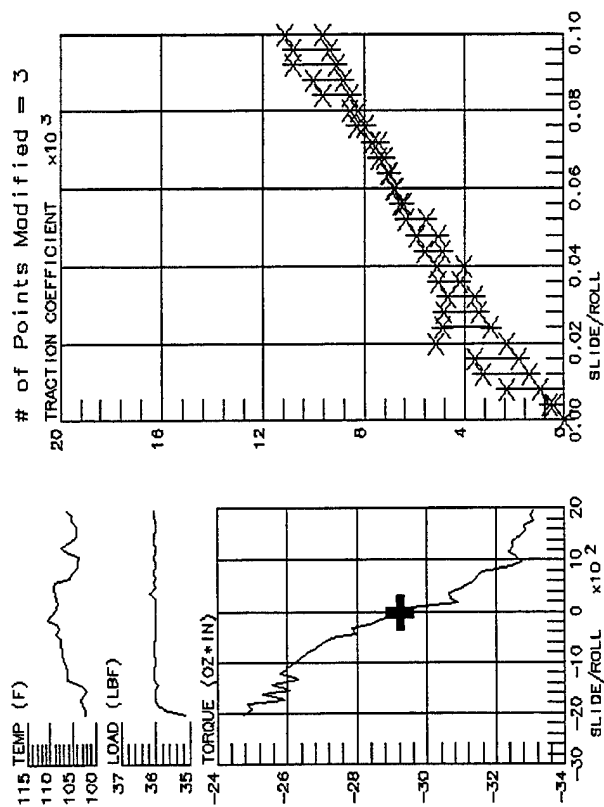
AC RL-714 Mobil 28 base oil
104F 13LBF 7210RPM 21 FILE: m28ao

#21
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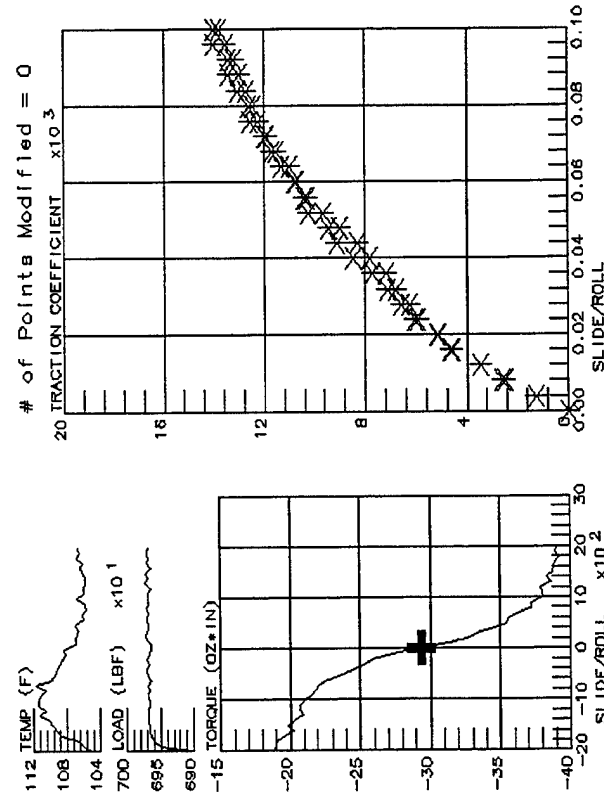
AC RL-714 Mobil 28 base oil
104F 35LBF 7210RPM 22 FILE: m28ao

#22
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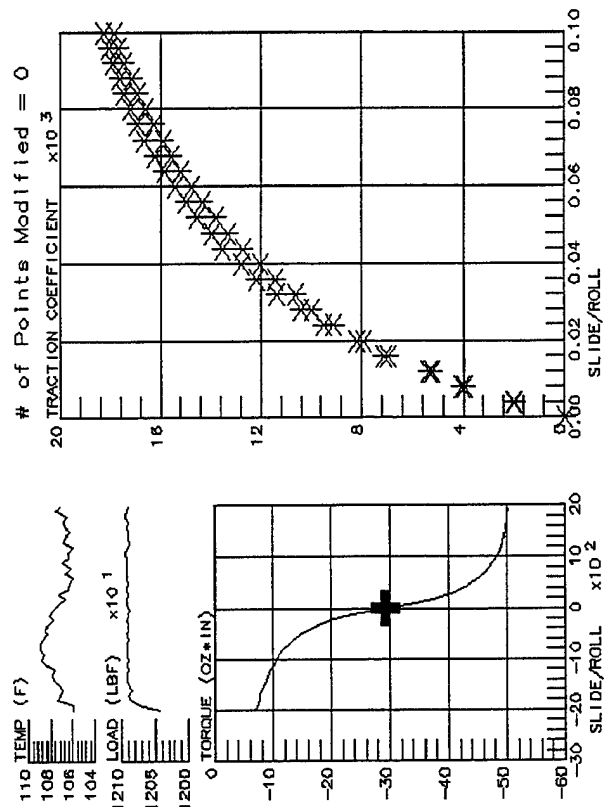
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104F 69LBF 7210RPM 23 FILE: m28ao

#23
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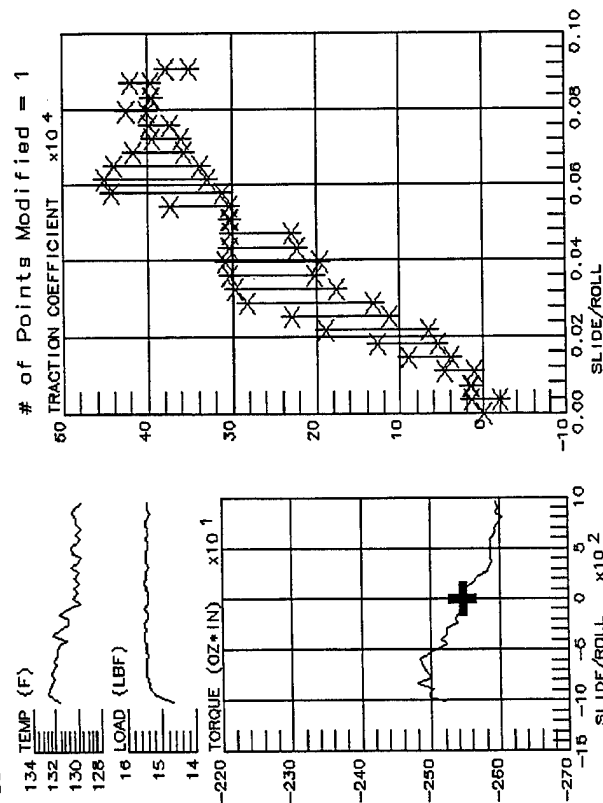
AC RL-714 Mobil 28 base oil
104F 121LBF 7210RPM 24 FILE: m28ao

#24
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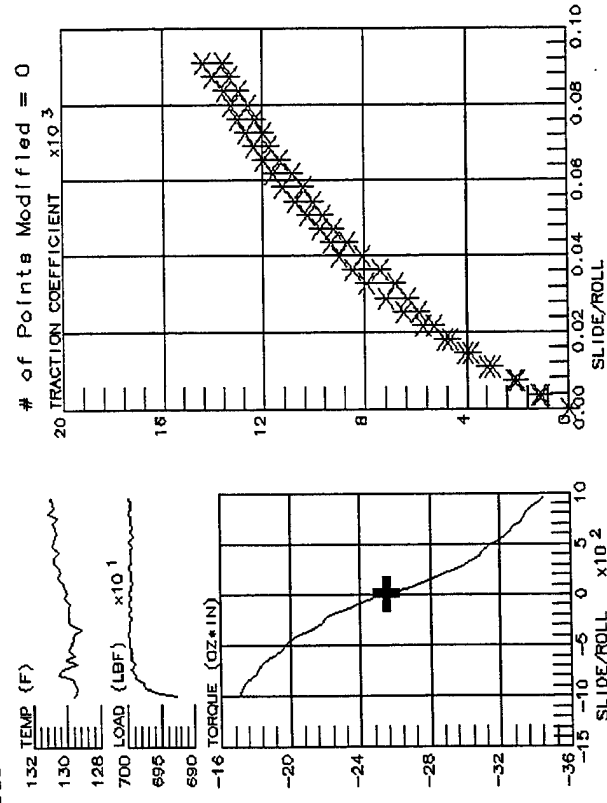
AC RL-714 Mobil 28 base oil
131F 13LBF 4810RPM 25 FILE: m28ao

#25
of Points Modified = 1



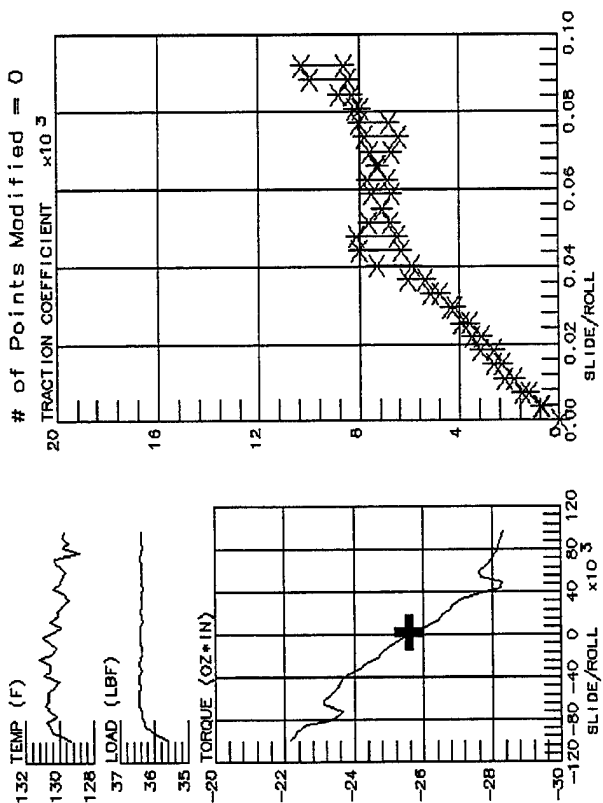
AC RL-714 Mobil 28 base oil
131F 69LBF 4810RPM 27 FILE: m28ac

#27
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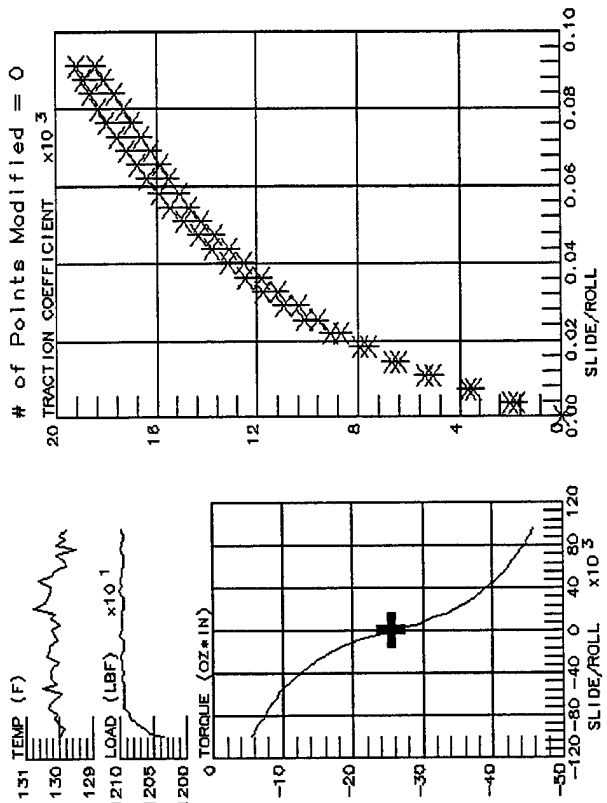
AC RL-714 Mobil 28 base oil
131F 36LBF 4810RPM 26 FILE: m28ao

#26
of Points Modified = 0



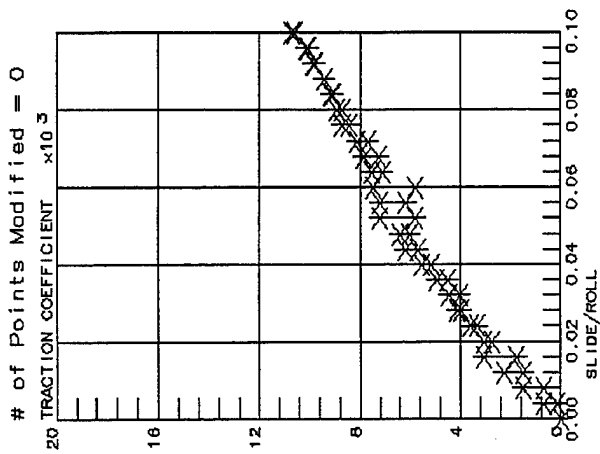
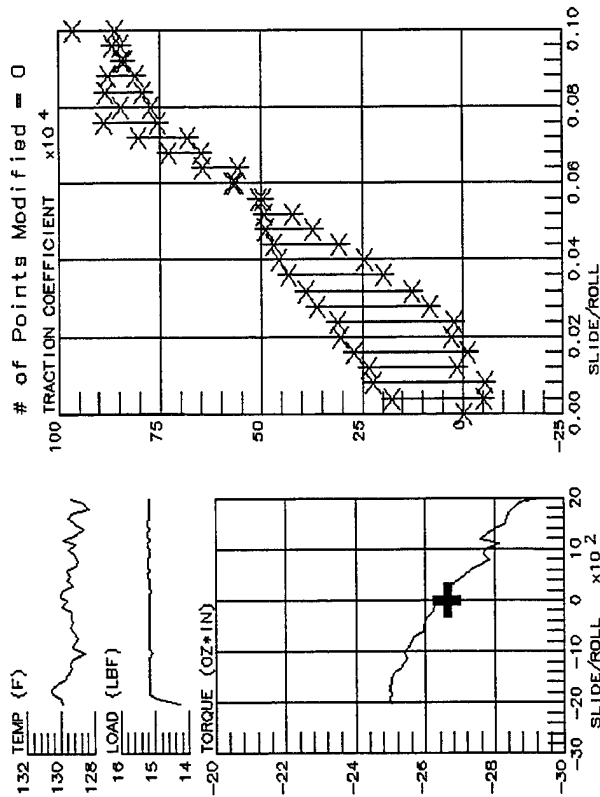
AC RL-714 Mobil 28 base oil
131F 121LBF 4810RPM 28 FILE: m28ac

#28
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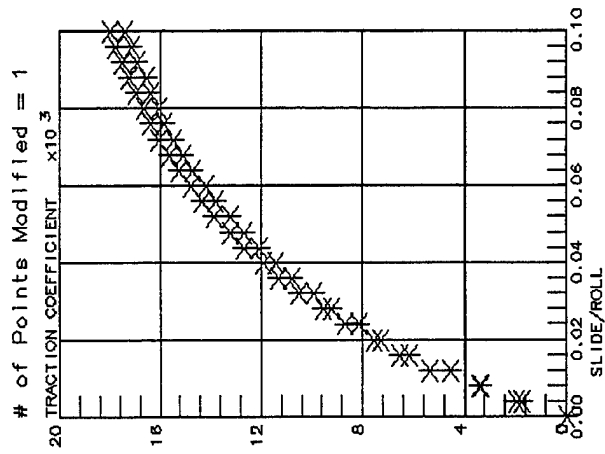
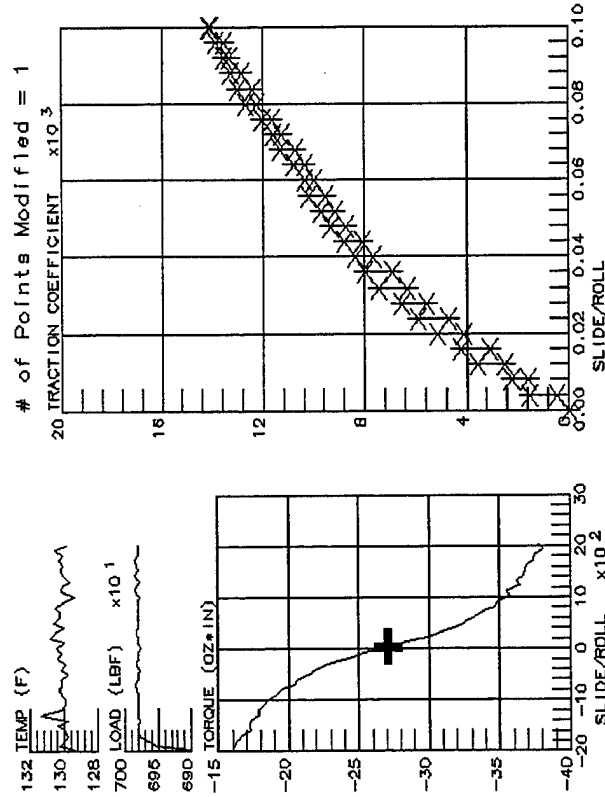
AC RL-714 Mobil 28 base oil
131F 13LBF 5970RPM 29 FILE: m28ac

#29
of Points Modified = 0



AC RL-714 Mobil 28 base oil
131F 69LBF 5970RPM 31 FILE: m28ac

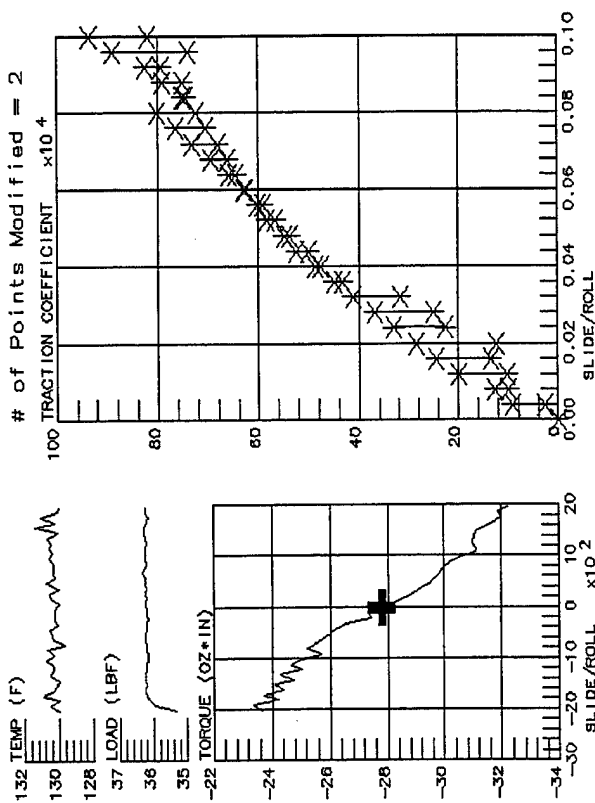
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#34

AC RL-714 Mobil 28 base oil
131F 35LBF 7210RPM 34 FILE: m28ac

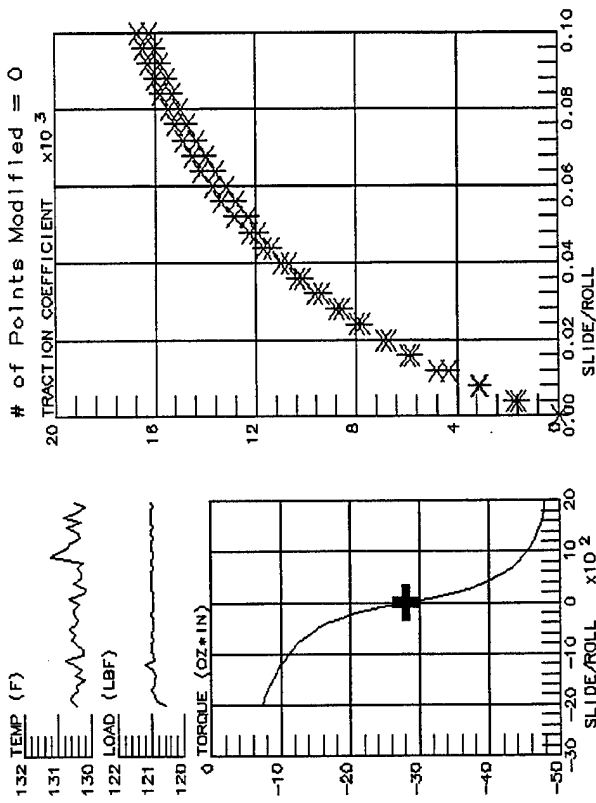
of Points Modified = 2



#36

AC RL-714 Mobil 28 base oil
131F 121LBF 7210RPM 36 FILE: m28ac

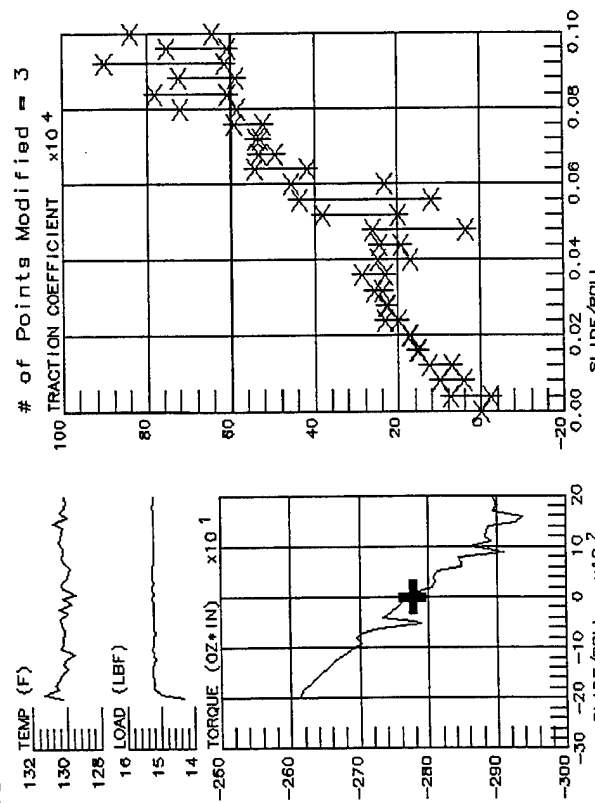
of Points Modified = 0



#33

AC RL-714 Mobil 28 base oil
131F 13LBF 7210RPM 33 FILE: m28ac

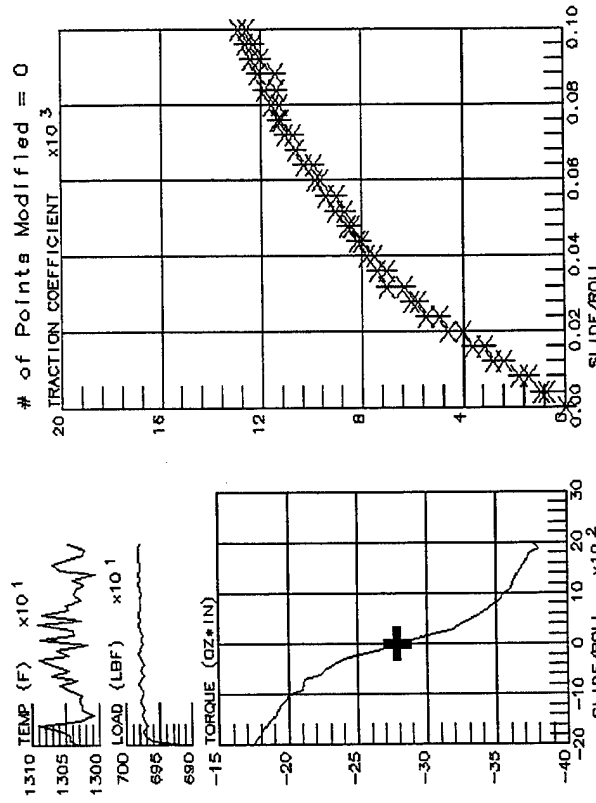
of Points Modified = 3



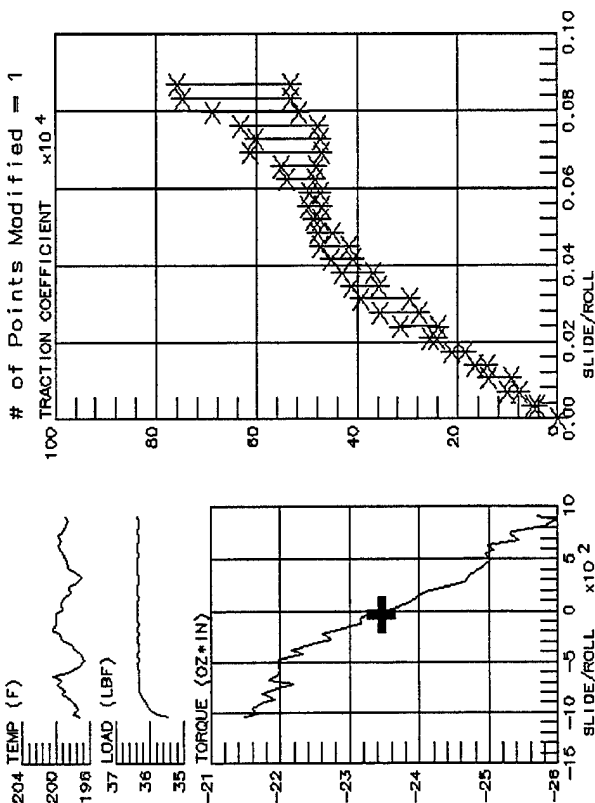
#35

AC RL-714 Mobil 28 base oil
131F 69LBF 7210RPM 35 FILE: m28ac

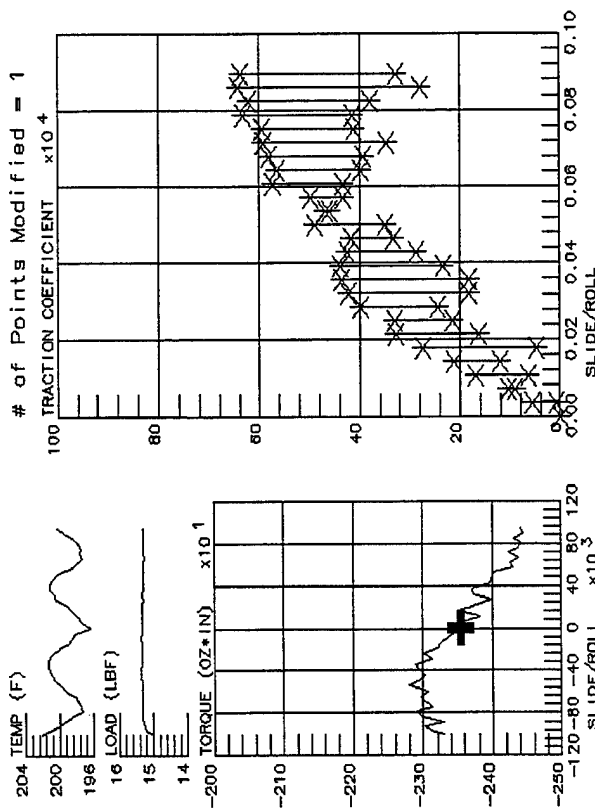
of Points Modified = 0



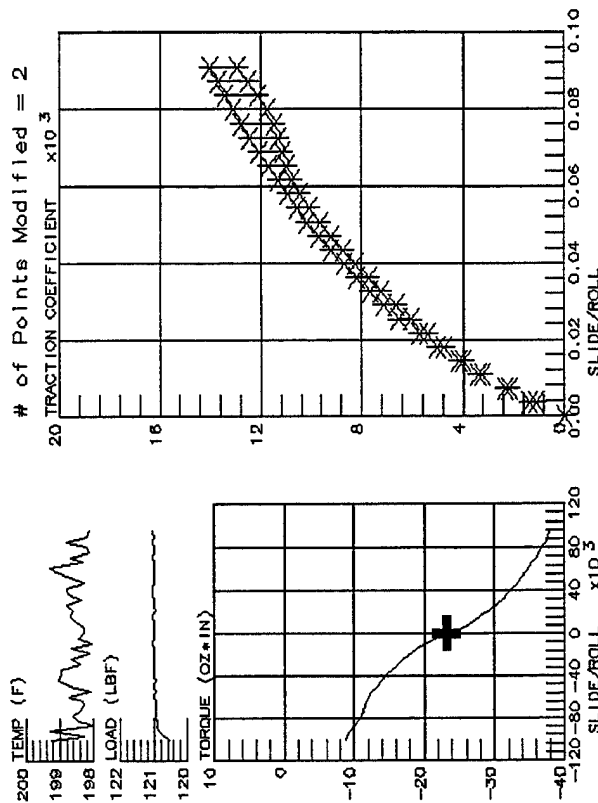
AC RL-714 Mobil 28 base oil #38
200F 35LBF 4810RPM 38 FILE: m28ac



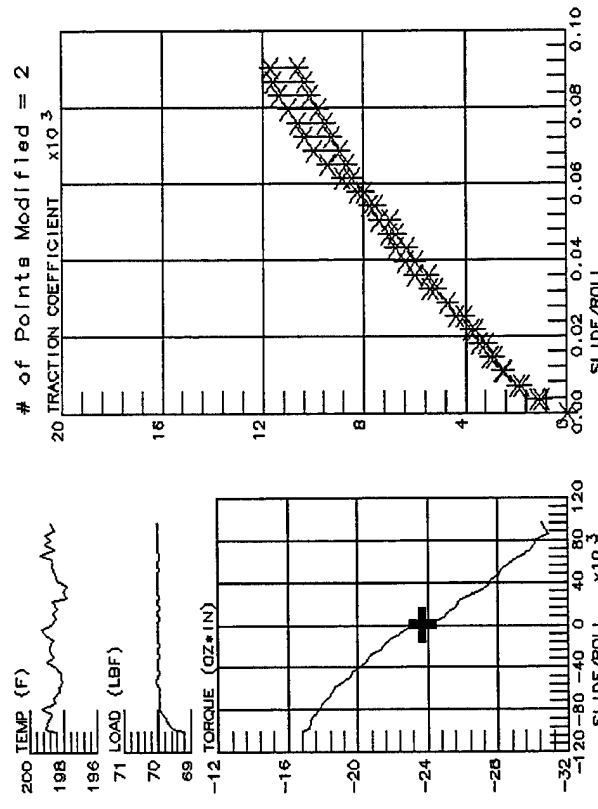
AC RL-714 Mobil 28 base oil #37
200F 13LBF 4810RPM 37 FILE: m28ac



AC RL-714 Mobil 28 base oil #40
200F 121LBF 4810RPM 40 FILE: m28ac

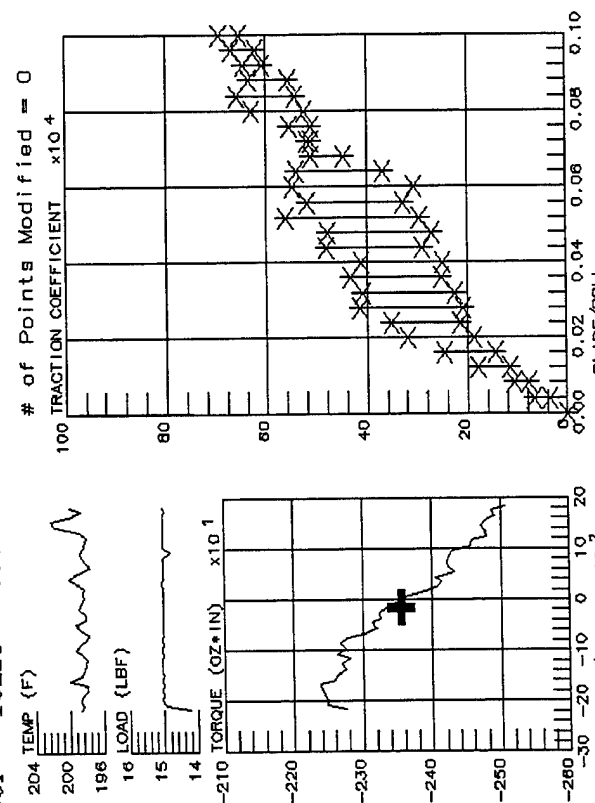
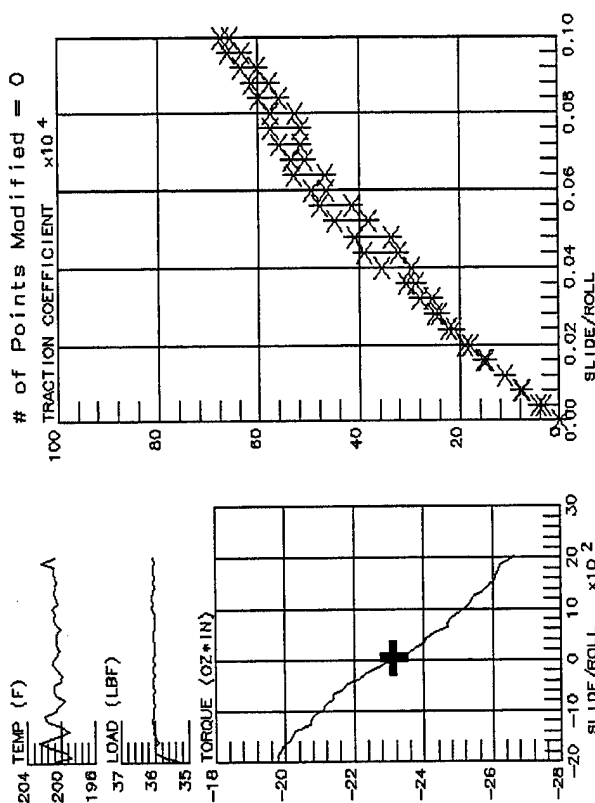


AC RL-714 Mobil 28 base oil #39
200F 69LBF 4810RPM 39 FILE: m28ac



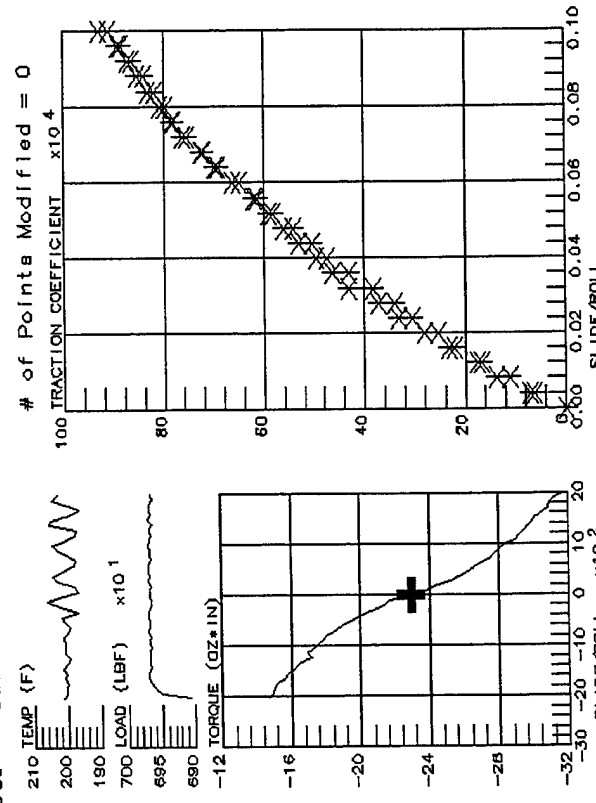
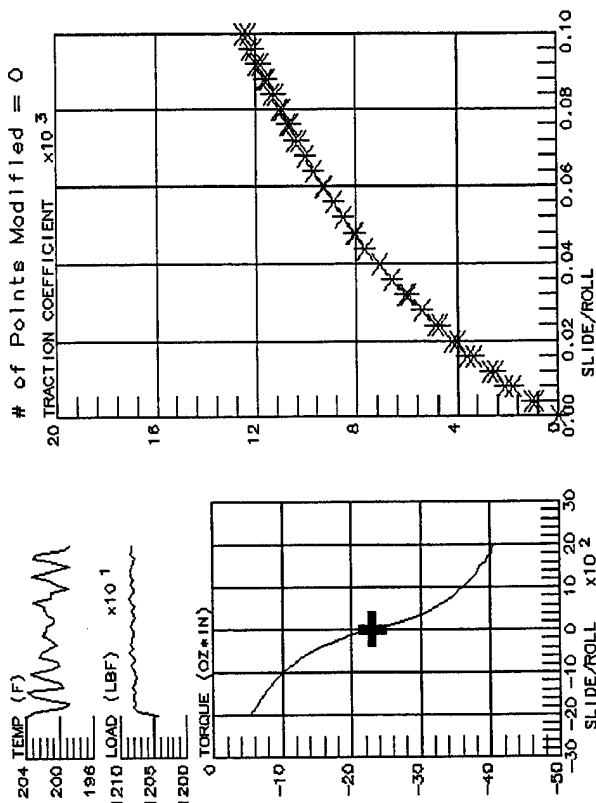
AC RL-714 Mobil 28 base oil
200F 35LBF 5970RPM 42 FILE: m28ac

AC RL-714 Mobil 28 base oil
200F 13LBF 5970RPM 41 FILE: m28ac



AC RL-714 Mobil 28 base oil
200F 121LBF 5970RPM 44 FILE: m28ac

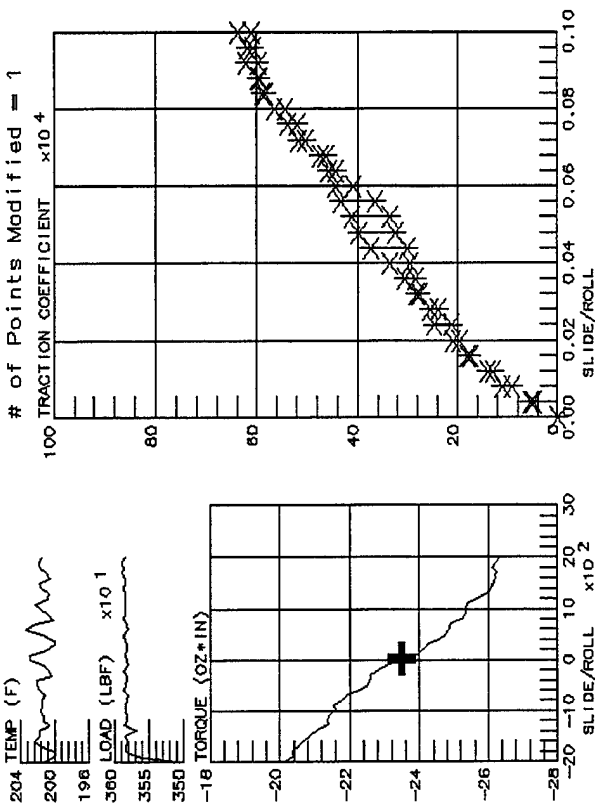
AC RL-714 Mobil 28 base oil
200F 69LBF 5970RPM 43 FILE: m28ac



#46

AC RL-714 Mobil 28 base oil
200F 35LBF 7210RPM 48 FILE: m28ao

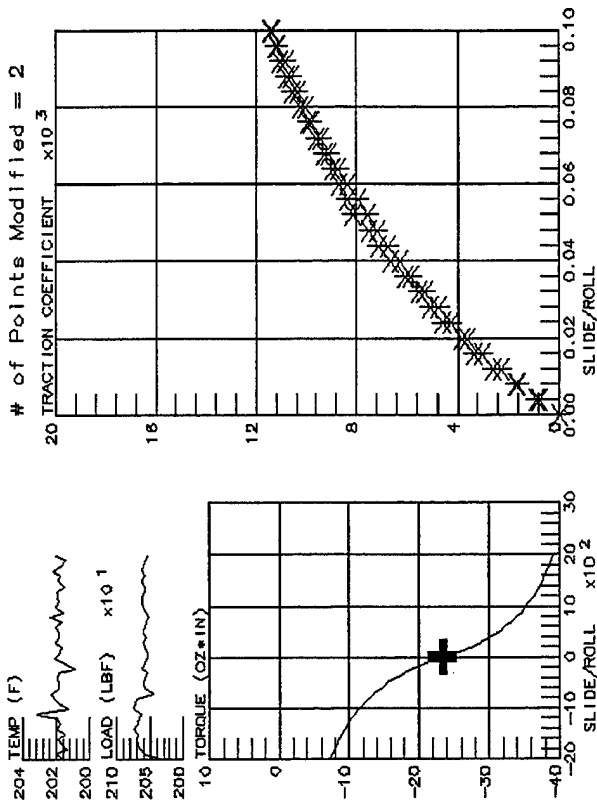
of Points Modified = 1



#48

AC RL-714 Mobil 28 base oil
200F 121LBF 7210RPM 48 FILE: m28ac

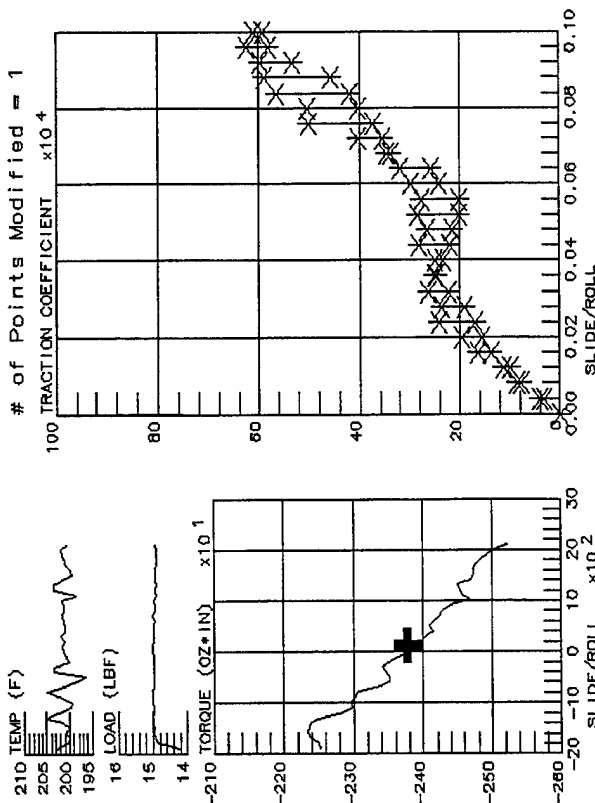
of Points Modified = 2



#45

AC RL-714 Mobil 28 base oil
200F 13LBF 7210RPM 45 FILE: m28ao

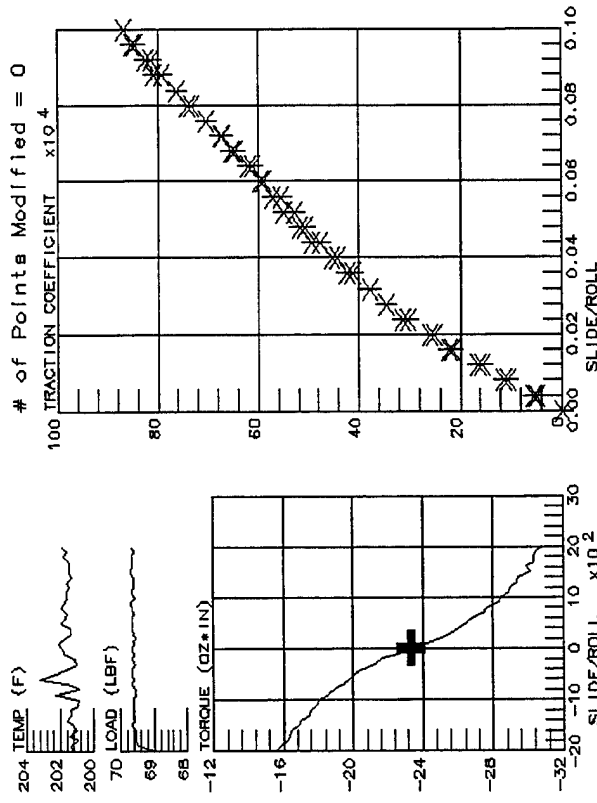
of Points Modified = 1



#47

AC RL-714 Mobil 28 base oil
200F 69LBF 7210RPM 47 FILE: m28ac

of Points Modified = 0



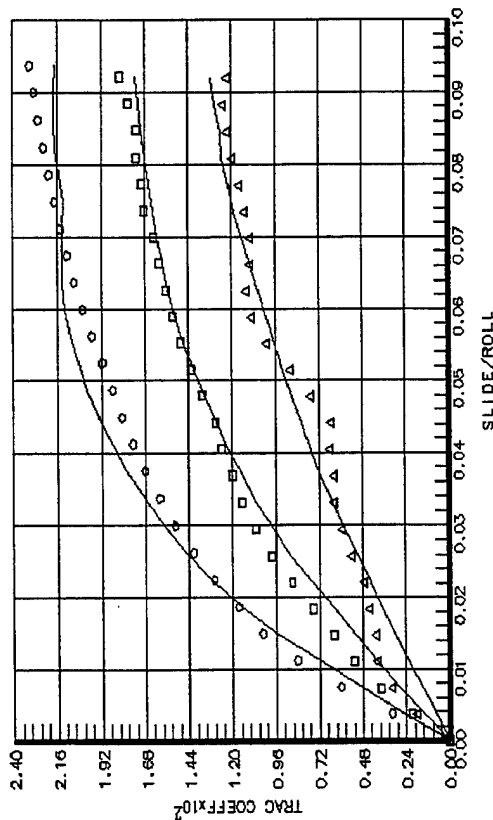
Lubricant name = AC RL-714 Mobil 28 base oil

NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| ac1.dat | 2.9833E+02 | 6.8768E+00 | 4.1893E-01 | 5.5000E-09 | 1.6127E-01 |
| ac2.dat | 2.9833E+02 | 8.5352E+00 | 3.8583E-01 | 5.5000E-09 | 1.2789E-01 |
| ac3.dat | 2.9833E+02 | 1.0308E+01 | 3.6764E-01 | 5.5000E-09 | 1.1743E-01 |
| ac4.dat | 3.1333E+02 | 6.8768E+00 | 3.2337E-01 | 5.5000E-09 | 2.0490E-01 |
| ac5.dat | 3.1333E+02 | 8.5352E+00 | 2.8329E-01 | 5.5000E-09 | 1.5890E-01 |
| ac6.dat | 3.1333E+02 | 1.0308E+01 | 2.6126E-01 | 5.5000E-09 | 1.3455E-01 |
| ac7.dat | 3.2833E+02 | 6.8768E+00 | 1.7393E-01 | 5.5000E-09 | 3.0633E-01 |
| ac8.dat | 3.2833E+02 | 8.5352E+00 | 1.4755E-01 | 5.5000E-09 | 2.1134E-01 |
| ac9.dat | 3.2833E+02 | 1.0308E+01 | 1.2990E-01 | 5.5000E-09 | 1.7198E-01 |
| ac12.dat | 3.6667E+02 | 1.0308E+01 | 5.8611E-02 | 5.5000E-09 | 3.7105E-01 |

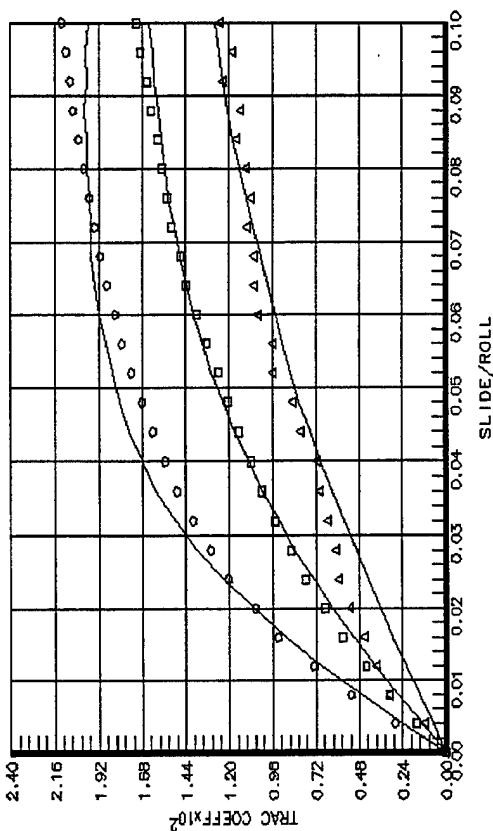
AC RL-714 Mobil 28 base oil

| NEWTONIAN MODEL | TYPE 1 | μ , dyn/cm^2 | XMU^* | ALFA^* | BETA* |
|-----------------|----------------|---------------------------|----------------|-----------------|-----------|
| 156N | 6.88M/S 298K # | 2 | 4.189E-01 | 5.500E-09 | 1.613E-01 |
| 877MPA | 6.88M/S 298K # | 3 | 4.189E-01 | 5.500E-09 | 1.613E-01 |
| 844MPA | 6.88M/S 298K # | 3 | 4.189E-01 | 5.500E-09 | 1.613E-01 |
| 1015MPA | 6.88M/S 298K # | 3 | 4.189E-01 | 5.500E-09 | 1.613E-01 |



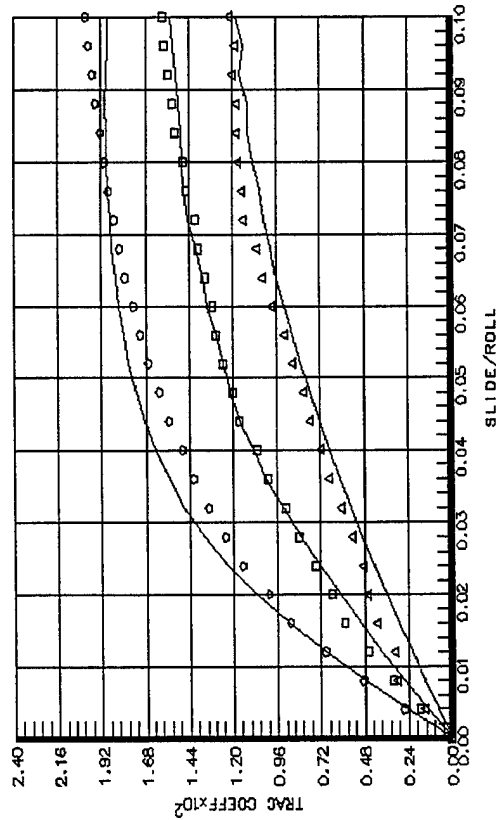
AC RL-714 Mobil 28 base oil

| NEWTONIAN MODEL | TYPE 1 | mag.dat | XMU* | ALFA* | BETA* |
|-----------------|--------|---------|----------|-----------|-----------|
| 673NPA | 156N | 8.54M/S | 298K # 8 | 3.538E-01 | 5.500E-09 |
| 843NPA | 307N | 8.54M/S | 298K # 7 | 3.538E-01 | 5.500E-09 |
| 1017NPA | 638N | 8.54M/S | 298K # 7 | 3.538E-01 | 5.500E-09 |



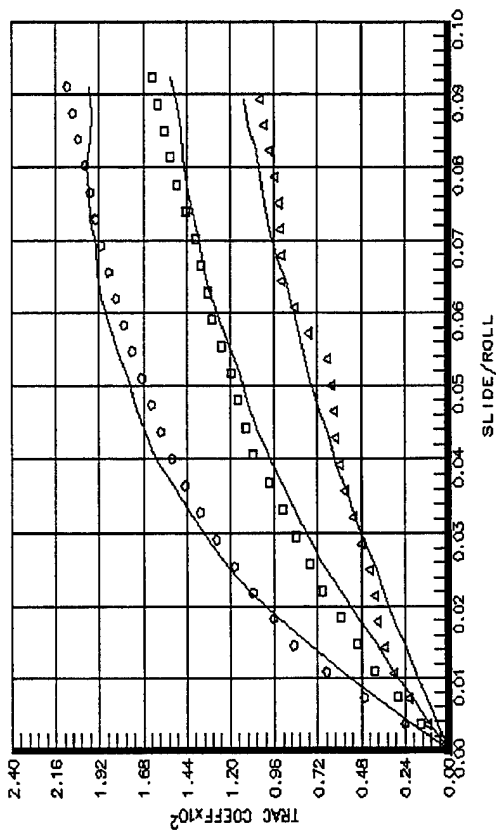
AC RL-714 Mobil 28 base oil

| NEWTONIAN MODEL | TYPE 1 | ASG.dat | ALFA* | BETA* |
|-----------------|-----------|---------|-------|-----------|
| 675MPa | 10.31M/\$ | 298K | # 10 | 3.876E-01 |
| 844MPa | 10.31M/\$ | 298K | # 11 | 3.876E-01 |
| 1015MPa | 10.31M/\$ | 298K | # 12 | 3.876E-01 |
| 156N | 10.31M/\$ | 298K | # 10 | 3.876E-01 |
| 307N | 10.31M/\$ | 298K | # 11 | 3.876E-01 |
| 358N | 10.31M/\$ | 298K | # 12 | 3.876E-01 |



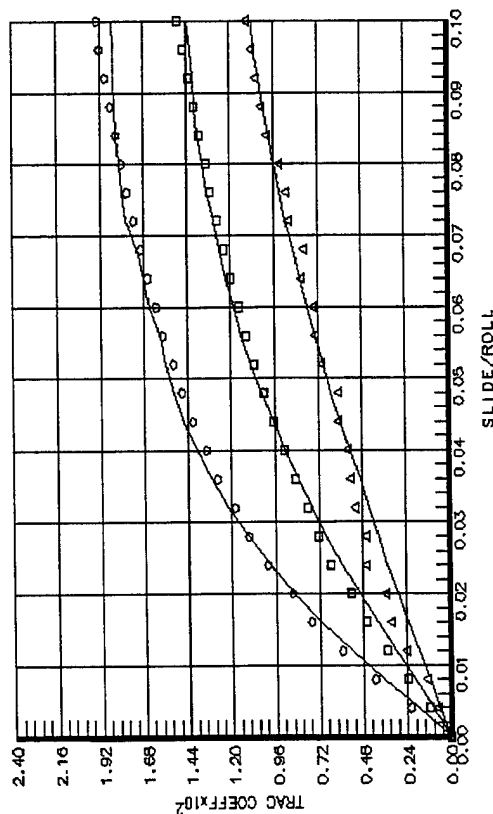
AC RL-714 Mobil 28 base oil

| NEWTONIAN MODEL | TYPE 1 | agc.dat | XMU* | ALEA* | BETA* |
|-----------------|---------|---------|------|----------|-----------|
| 682HPA | 6.8BM/S | 3.3K | 14 | 5.00E-08 | 3.049E-01 |
| 848HPA | 6.8BM/S | 3.3K | 15 | 5.00E-08 | 3.049E-01 |
| 1018HPA | 6.8BM/S | 3.3K | 16 | 5.00E-08 | 3.049E-01 |
| 53BN | 6.8BM/S | 3.3K | 16 | 5.00E-09 | 3.049E-01 |

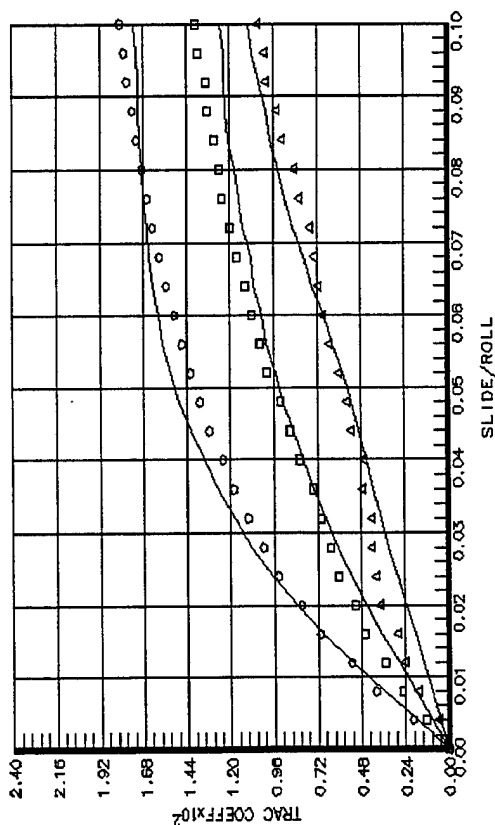


AC RL-714 Mobil 28 base oil

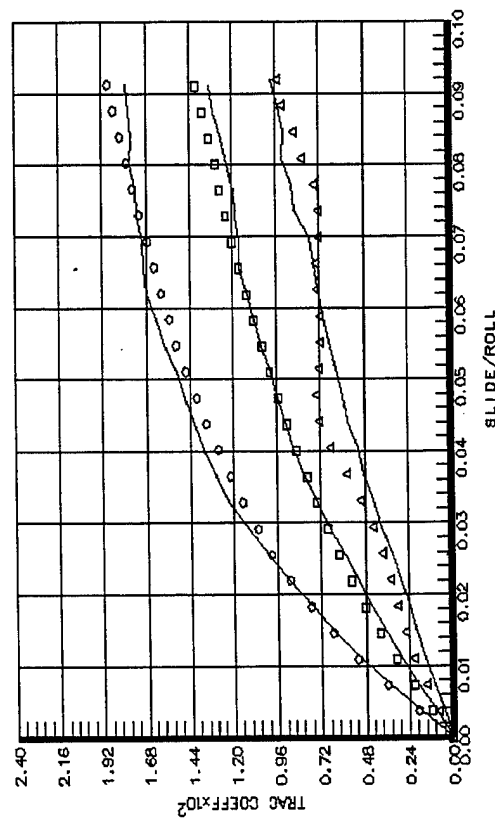
| AC RL-714 Mobil 28 base oil | | TYPE 1 | | XMU* | | ALFA* | | BETA* | |
|-----------------------------|---------|----------|------|------|-----------|-----------|-----------|-------|--|
| NEWTONIAN MODEL | | SUB. DAT | | | | | | | |
| 156N | 680MPa | 8.54M/S | 313K | # 18 | 2.833E-01 | 5.500E-09 | 1.588E-01 | | |
| 307N | 847MPa | 8.54M/S | 313K | # 19 | 2.833E-01 | 5.500E-09 | 1.588E-01 | | |
| 536N | 1017MPa | 8.54M/S | 313K | # 20 | 2.833E-01 | 5.500E-09 | 1.588E-01 | | |

AC RL-714 Mobil 28 base oil
MADE IN U.S.A.
 AMERICAN OIL CO.

| AC RL-714 | | Mobil 28 base oil | | aob.dat | | |
|-----------------|---------|-------------------|--------------------|-----------|----------|-----------|
| NEWTONIAN MODEL | | TYPE 1 | | | | |
| | | | | YMU* | ALFA* | BETA* |
| 5 | 57MPa | 155N | 10.31M/S 313K # 22 | 2.613E-01 | 5.50E-08 | 1.346E-01 |
| 5 | 847MPa | 107N | 10.31M/S 313K # 23 | 2.613E-01 | 5.50E-08 | 1.346E-01 |
| 5 | 1017MPa | 355N | 10.31M/S 313K # 24 | 2.613E-01 | 5.50E-08 | 1.346E-01 |

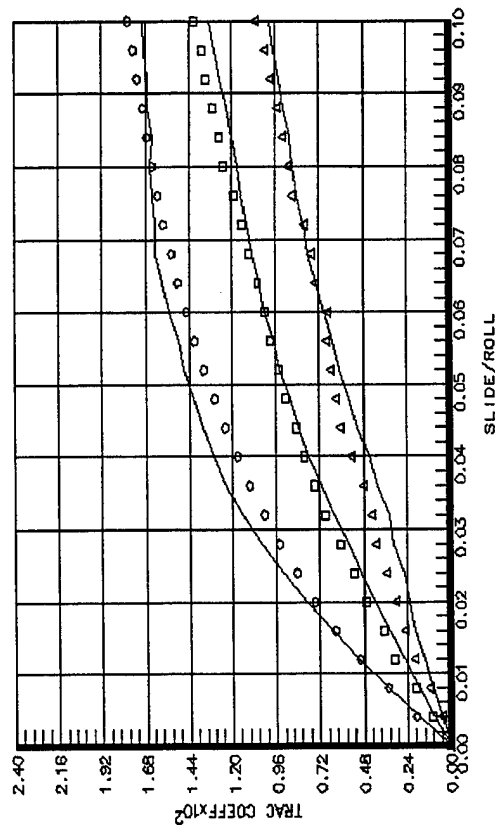


AC RL-714 Mobil 28 base oil

[illegible]

AC RL-714 Mobil 28 base oil

| AC RL-714 | | Mobil 28 base oil | | | |
|-----------------|------|-------------------|----------------------|-----------|----------|
| NEWTONIAN MODEL | | TYPE 1 | acg, dm ³ | XMU* | BETA* |
| 8.54M/S | 158N | 328K | # 30 | 1.476E-01 | 5.50E-09 |
| 8.54M/S | 328K | # 31 | 1.476E-01 | 5.50E-09 | 2.11E-01 |
| 8.54M/S | 328K | # 32 | 1.476E-01 | 5.50E-09 | 2.11E-01 |
| 8.54M/S | 328K | # 32 | 1.476E-01 | 5.50E-09 | 2.11E-01 |



4. Traction Data Set C: Shell ST-78 Gear Oil

Data set name: AD Shell ST-78 (Navy Gear Oil 2190)
 Rolling radii [Disks 1 & 2] (in): 0.54 0.54
 Crown radii [Disks 1 & 2] (in): 36.30 37.00

Number of data sets found = 48

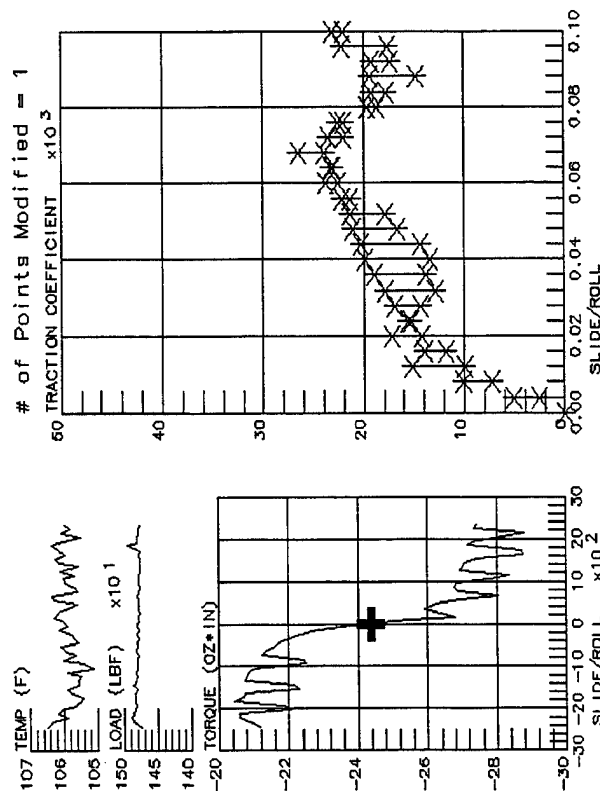
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Points | Dataset/Test # |
|----|-----------|-------------|---------|---------|---------|--------|----------------|
| 1 | 104.00 | 13.42 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #1 |
| 2 | 104.00 | 34.01 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #2 |
| 3 | 104.00 | 66.67 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #3 |
| 4 | 104.00 | 116.37 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #4 |
| 5 | 104.00 | 13.42 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #5 |
| 6 | 104.00 | 34.01 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #6 |
| 7 | 104.00 | 66.67 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #7 |
| 8 | 104.00 | 116.37 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #8 |
| 9 | 104.00 | 13.42 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #9 |
| 10 | 104.00 | 34.01 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #10 |
| 11 | 104.00 | 66.67 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #11 |
| 12 | 104.00 | 116.37 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #12 |
| 13 | 200.00 | 13.42 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #13 |
| 14 | 200.00 | 34.01 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #14 |
| 15 | 200.00 | 66.67 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #15 |
| 16 | 200.00 | 116.37 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad1 #16 |
| 17 | 200.00 | 13.42 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #17 |
| 18 | 200.00 | 34.01 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #18 |
| 19 | 200.00 | 66.67 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #19 |
| 20 | 200.00 | 116.37 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad1 #20 |
| 21 | 200.00 | 13.42 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #21 |
| 22 | 200.00 | 34.01 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #22 |
| 23 | 200.00 | 66.67 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #23 |
| 24 | 200.00 | 116.37 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad1 #24 |
| 25 | 77.00 | 13.51 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #1 |
| 26 | 77.00 | 34.10 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #2 |
| 27 | 77.00 | 66.76 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #3 |
| 28 | 77.00 | 116.46 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #4 |
| 29 | 77.00 | 13.51 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #5 |
| 30 | 77.00 | 34.10 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #6 |
| 31 | 77.00 | 66.76 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #7 |
| 32 | 77.00 | 116.46 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #8 |
| 33 | 77.00 | 13.51 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #9 |
| 34 | 77.00 | 34.10 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #10 |
| 35 | 77.00 | 66.76 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #11 |
| 36 | 77.00 | 116.46 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #12 |
| 37 | 131.00 | 13.51 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #13 |
| 38 | 131.00 | 34.10 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #14 |
| 39 | 131.00 | 66.76 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #15 |
| 40 | 131.00 | 116.46 | 4244.00 | 5396.00 | 4820.00 | 49 | st78ad3 #16 |
| 41 | 131.00 | 13.51 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #17 |
| 42 | 131.00 | 34.10 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #18 |
| 43 | 131.00 | 66.76 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #19 |
| 44 | 131.00 | 116.46 | 5260.00 | 6700.00 | 5980.00 | 49 | st78ad3 #20 |
| 45 | 131.00 | 13.51 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #21 |
| 46 | 131.00 | 34.10 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #22 |
| 47 | 131.00 | 66.76 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #23 |
| 48 | 131.00 | 116.46 | 6356.00 | 8084.00 | 7220.00 | 49 | st78ad3 #24 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|---------|-------------|
| ad1.dat | 77.00 | 4820.00 | 26 27 28 |
| ad2.dat | 77.00 | 5980.00 | 30 31 32 |
| ad3.dat | 77.00 | 7220.00 | 34 35 36 |
| ad4.dat | 104.00 | 4820.00 | 2 3 4 |
| ad5.dat | 104.00 | 5980.00 | 6 7 8 |
| ad6.dat | 104.00 | 7220.00 | 10 11 12 |
| ad7.dat | 131.00 | 4820.00 | 38 39 40 |
| ad8.dat | 131.00 | 5980.00 | 42 43 44 |
| ad9.dat | 131.00 | 7220.00 | 46 47 48 |
| ad10.dat | 200.00 | 4820.00 | 14 15 16 |
| ad11.dat | 200.00 | 5980.00 | 18 19 20 |
| ad12.dat | 200.00 | 7220.00 | 22 23 24 |

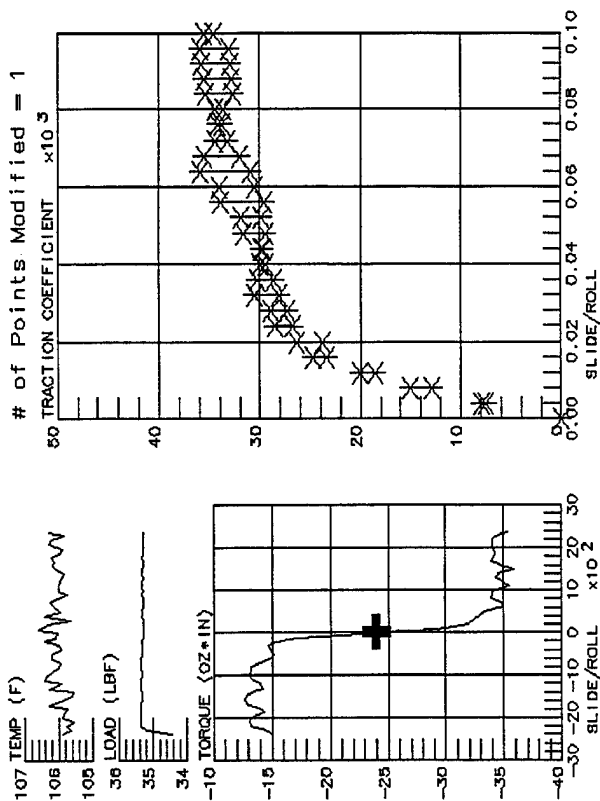
AD Shell ST-78 (Navy Gear Oil 2190) #1
104F 13LBF 4820RPM 1 FILE: st78ad1

of Points Modified = 1



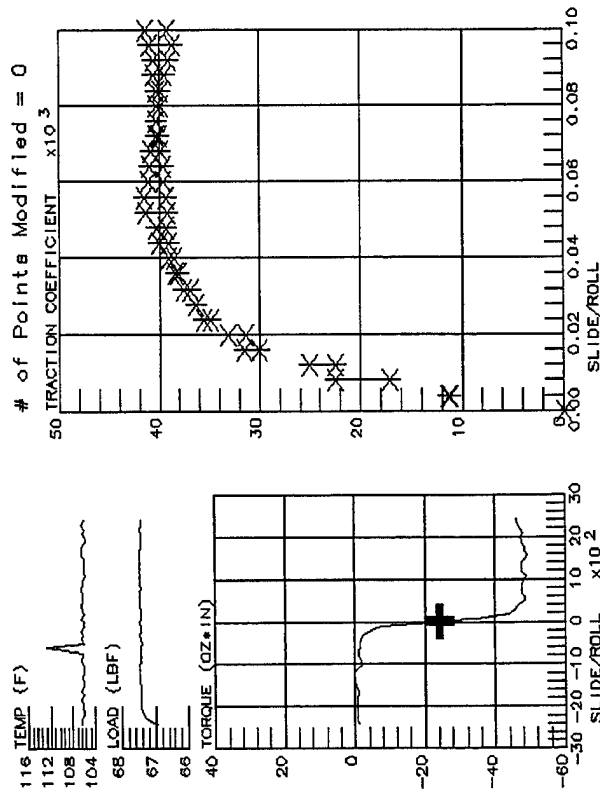
AD Shell ST-78 (Navy Gear Oil 2190) #2
104F 34LBF 4820RPM 2 FILE: st78ad1

of Points Modified = 1



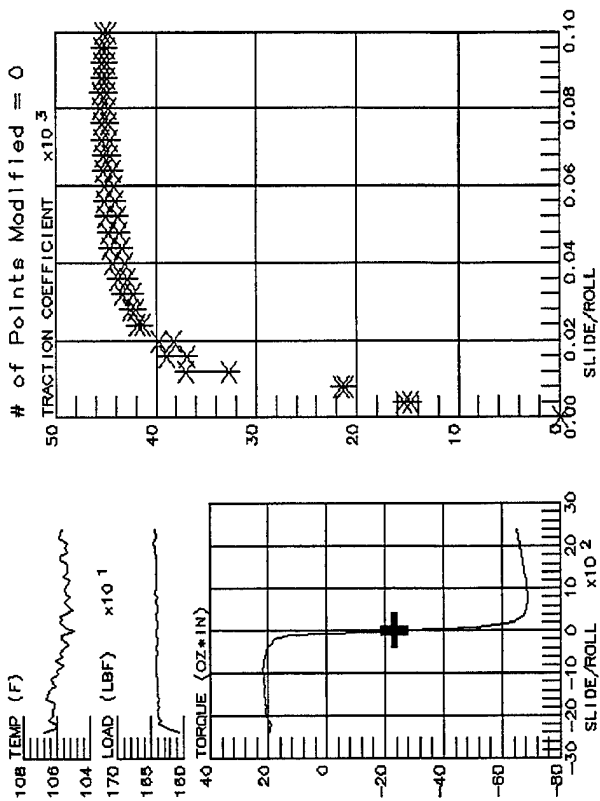
AD Shell ST-78 (Navy Gear Oil 2190) #3
104F 67LBF 4820RPM 3 FILE: st78ad1

of Points Modified = 0

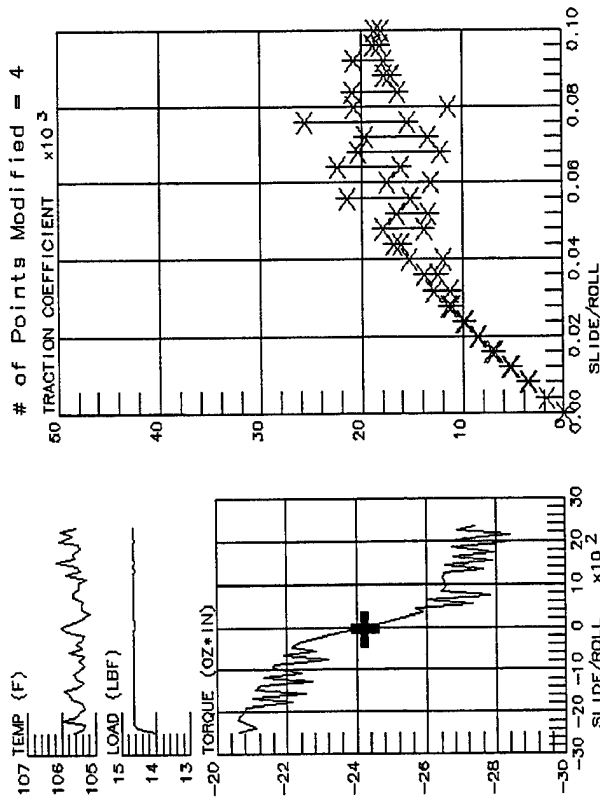


AD Shell ST-78 (Navy Gear Oil 2190) #4
104F 116LBF 4820RPM 4 FILE: st78ad1

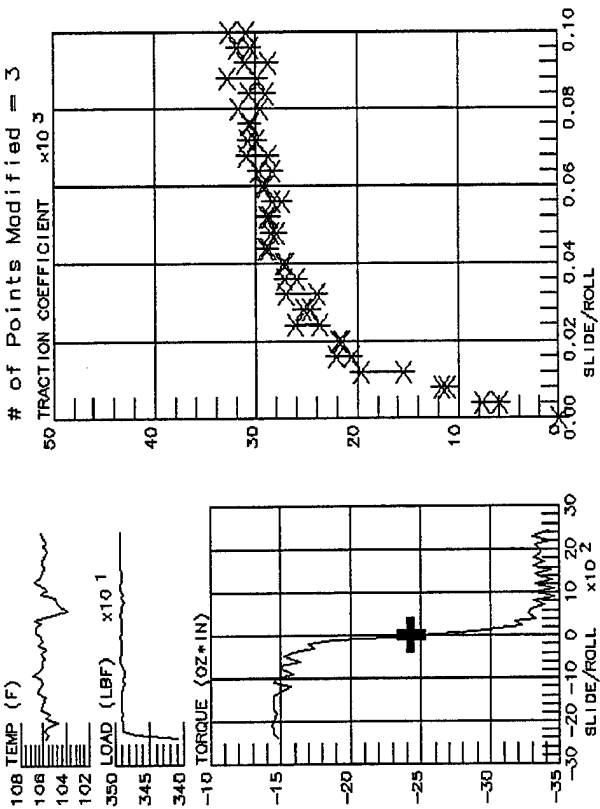
of Points Modified = 0



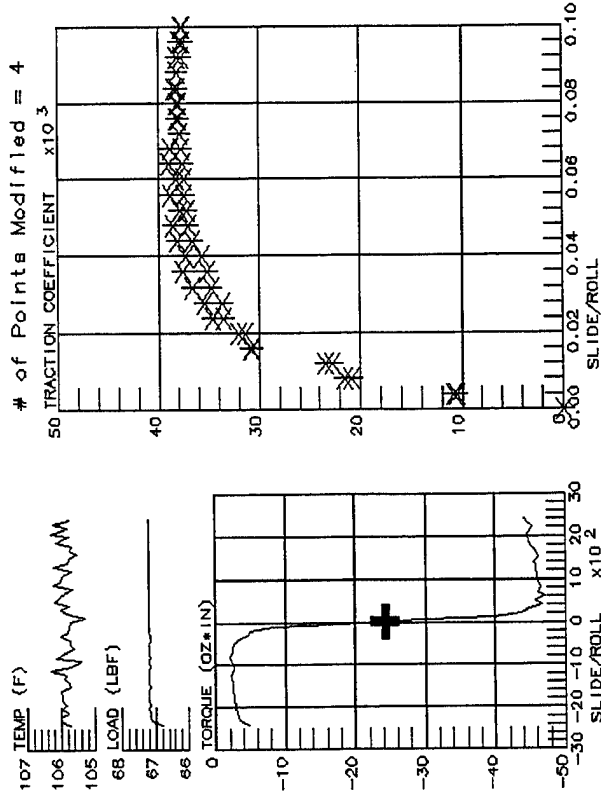
AD Shell ST-78 (Navy Gear Oil 2190) #5
104F 13LBF 5980RPM 5 FILE: st78ad1



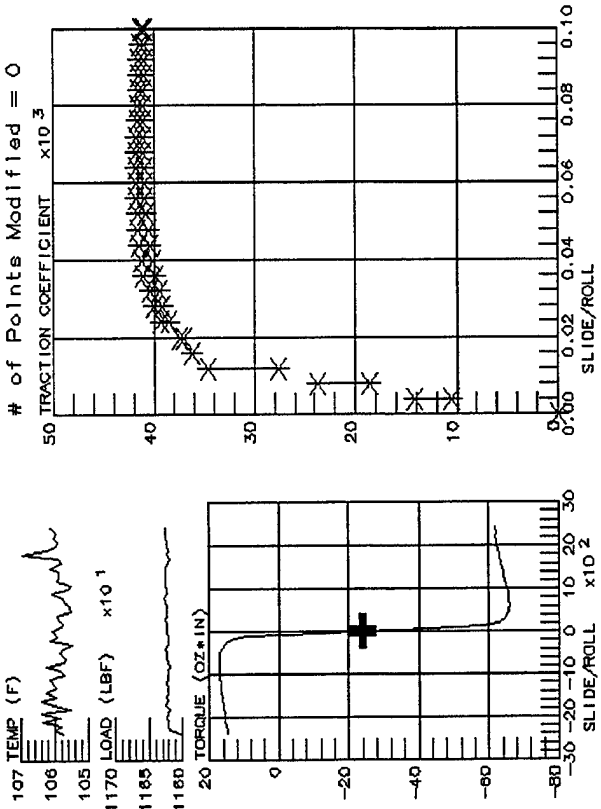
AD Shell ST-78 (Navy Gear Oil 2190) #8
104F 34LBF 5980RPM 8 FILE: st78ad1



AD Shell ST-78 (Navy Gear Oil 2190) #7
104F 67LBF 5980RPM 7 FILE: st78ad1

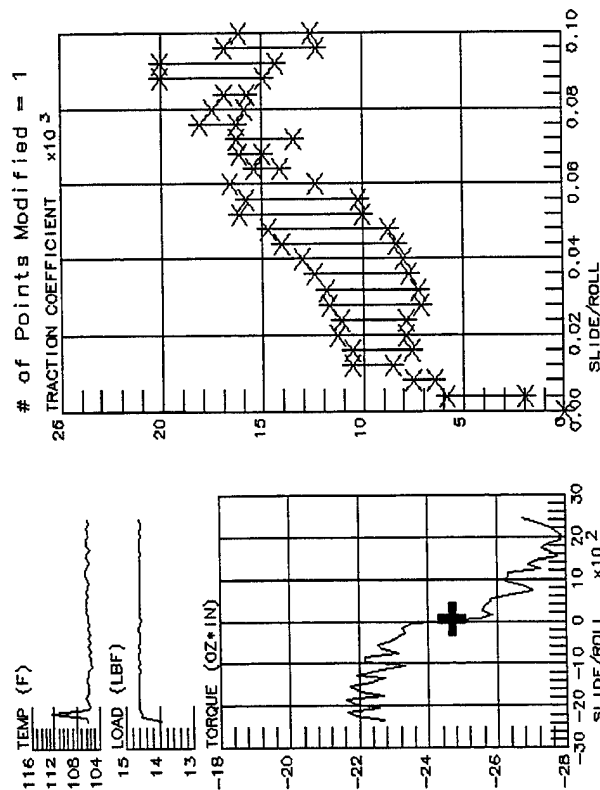


AD Shell ST-78 (Navy Gear Oil 2190) #8
104F 116LBF 5980RPM 8 FILE: st78ad1



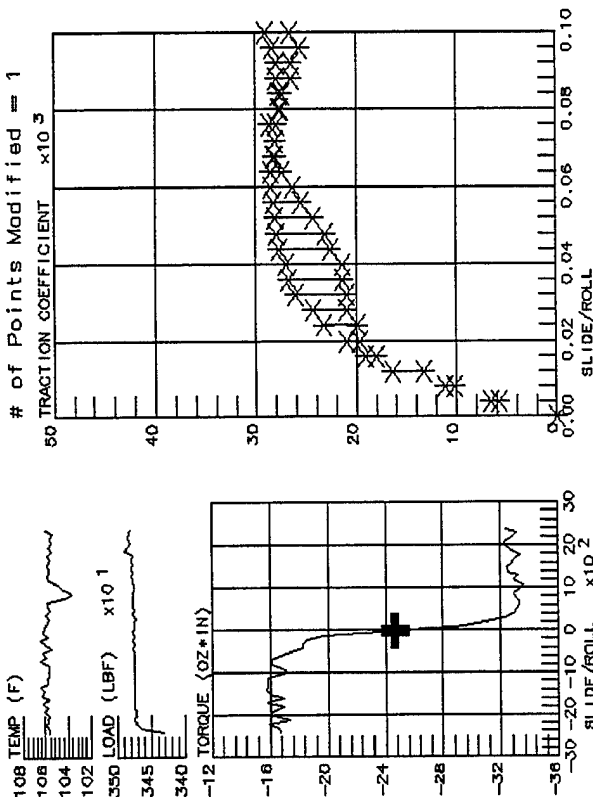
AD Shell ST-78 (Navy Gear Oil 2190) #9
104F 13LBF 7220RPM 9 FILE: st78ad1

of Points Modified = 1



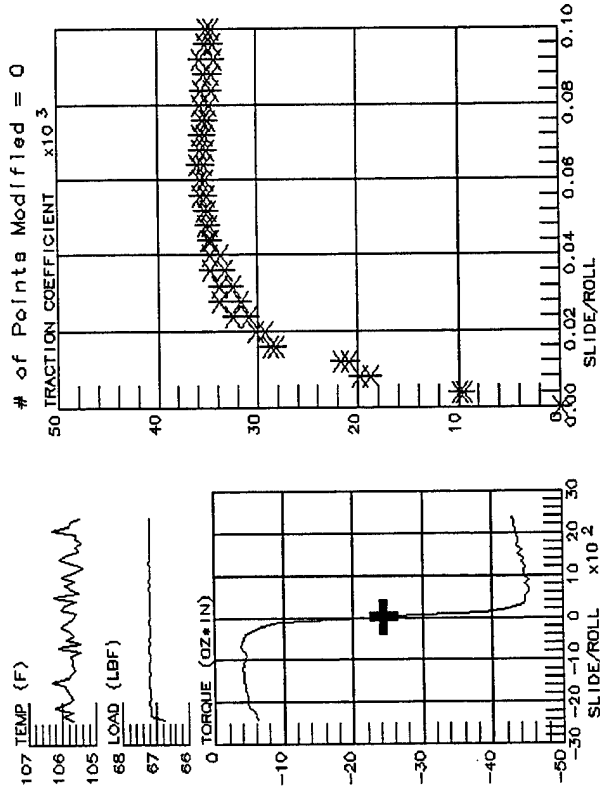
AD Shell ST-78 (Navy Gear Oil 2190) #10
104F 34LBF 7220RPM 10 FILE: st78ad1

of Points Modified = 1



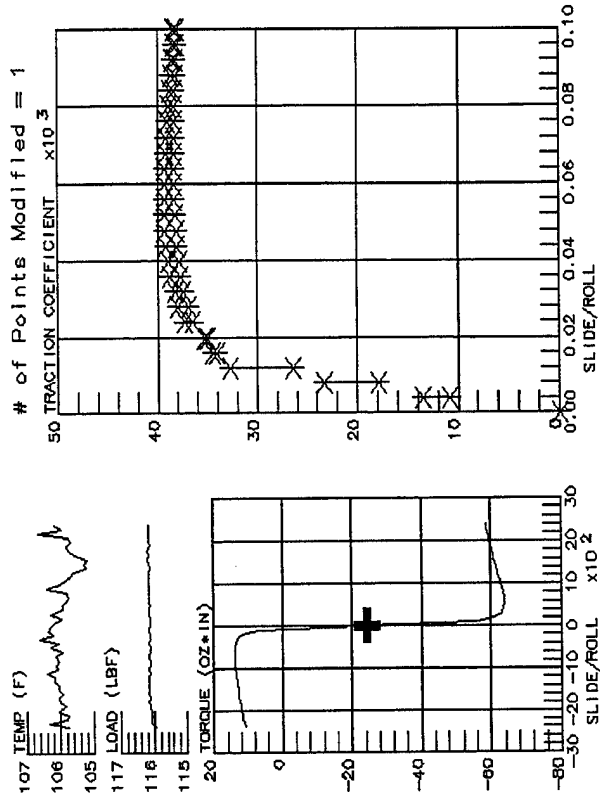
AD Shell ST-78 (Navy Gear Oil 2190) #11
104F 67LBF 7220RPM 11 FILE: st78ad1

of Points Modified = 0

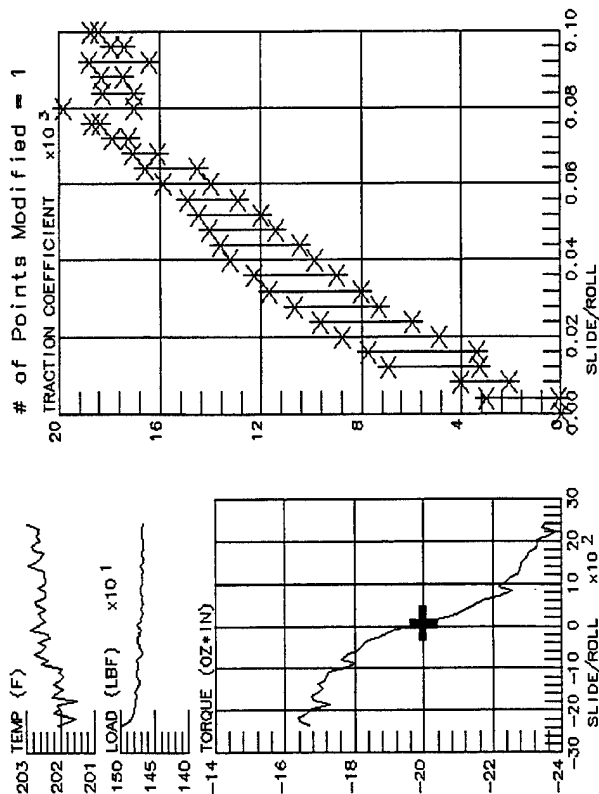


AD Shell ST-78 (Navy Gear Oil 2190) #12
104F 116LBF 7220RPM 12 FILE: st78ad1

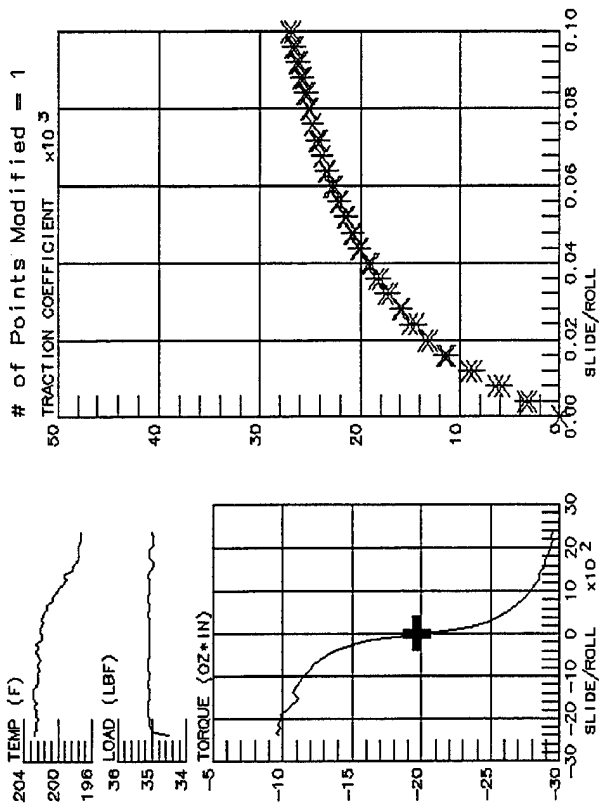
of Points Modified = 1



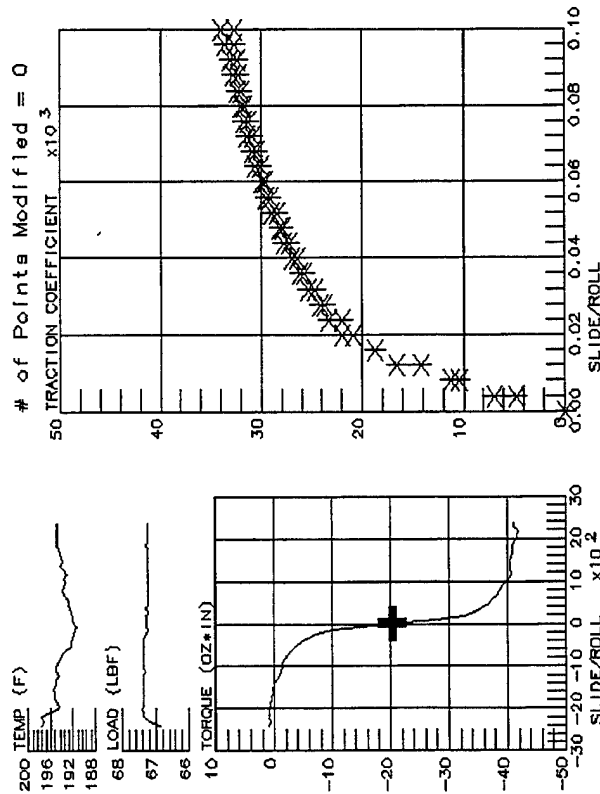
AD Shell ST-78 (Navy Gear Oil 2190) #13
200F 13LBF 4820RPM 13 FILE: st78ad1



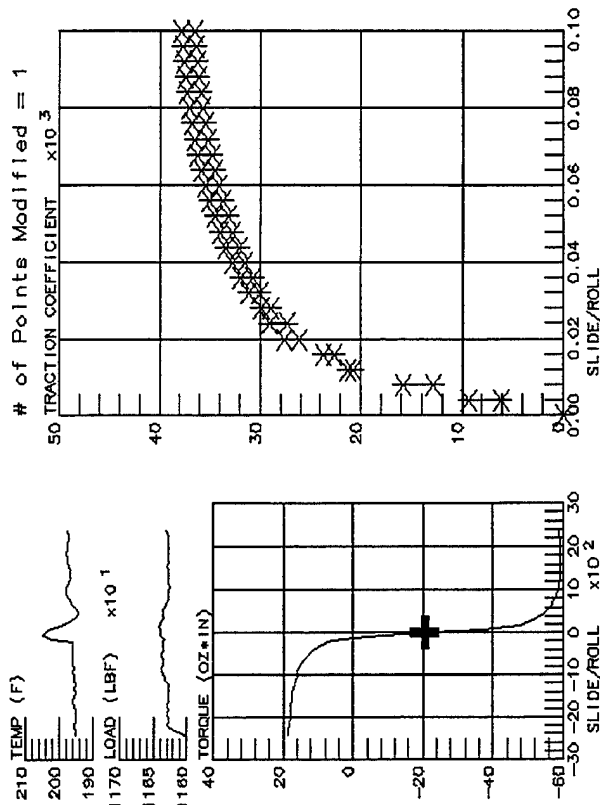
AD Shell ST-78 (Navy Gear Oil 2190) #14
200F 34LBF 4820RPM 14 FILE: st78ad1



AD Shell ST-78 (Navy Gear Oil 2190) #15
200F 67LBF 4820RPM 15 FILE: st78ad1

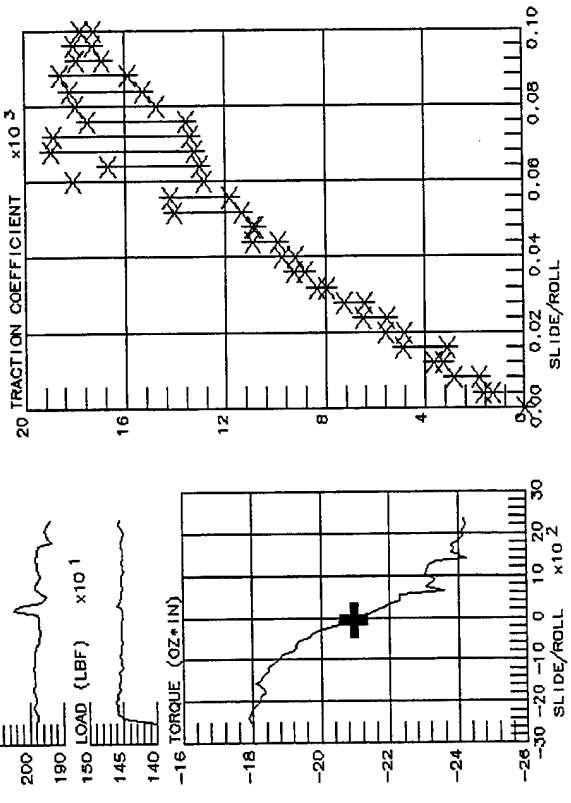


AD Shell ST-78 (Navy Gear Oil 2190) #16
200F 116LBF 4820RPM 16 FILE: st78ad1



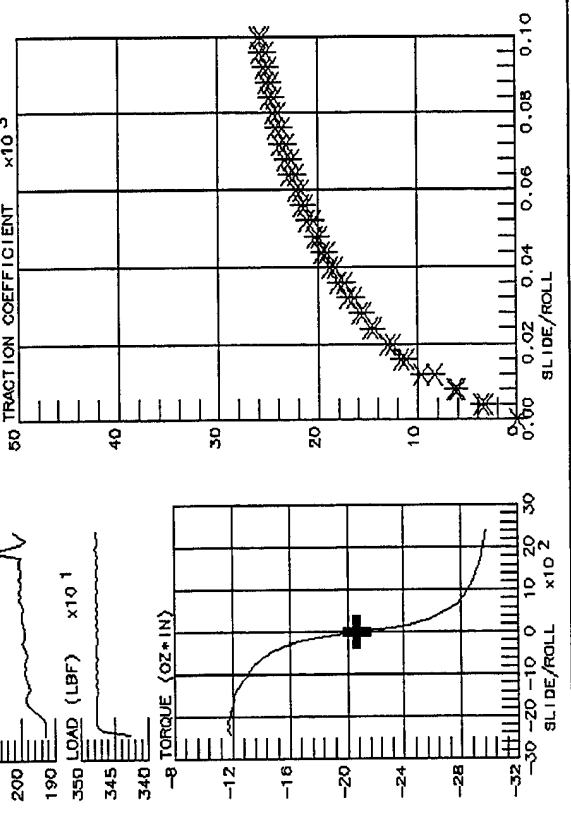
AD Shell ST-78 (Navy Gear Oil 2190) #17
200F 13LBF 5980RPM 17 FILE: st78ad1

of Points Modified = 2



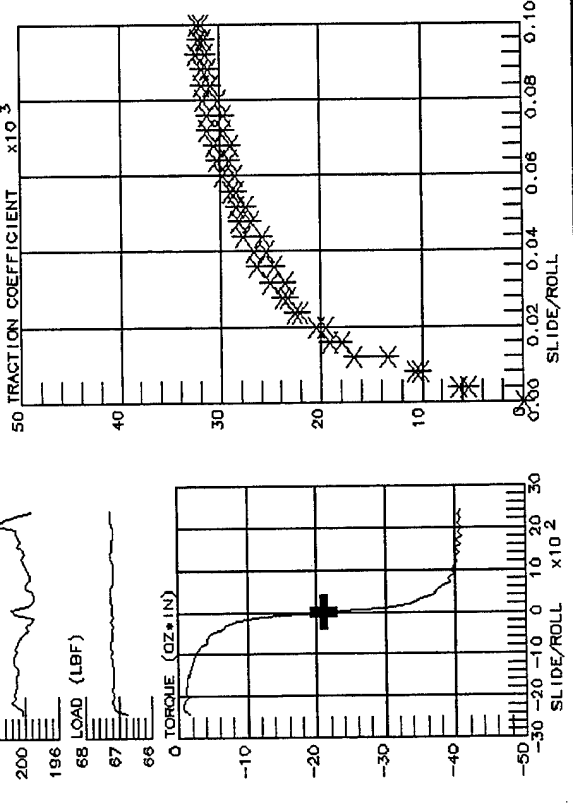
AD Shell ST-78 (Navy Gear Oil 2190) #18
200F 34LBF 5980RPM 18 FILE: st78ad1

of Points Modified = 3



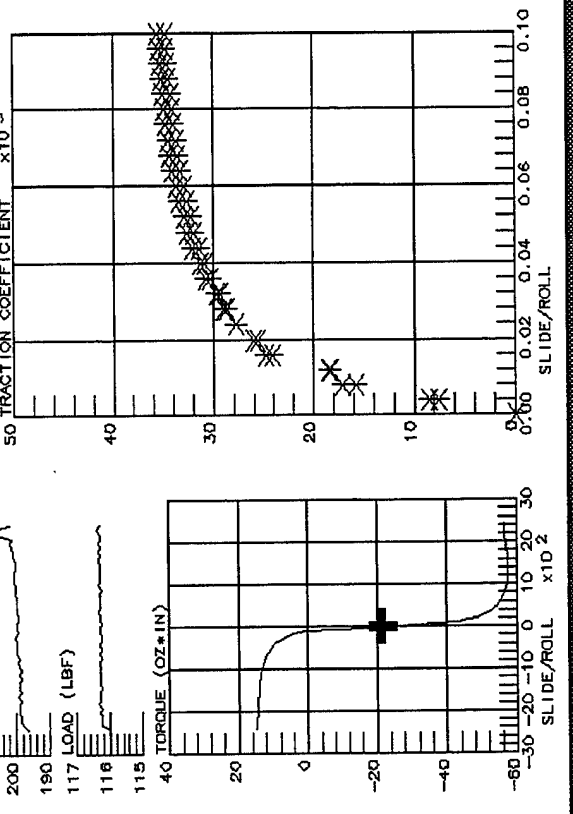
AD Shell ST-78 (Navy Gear Oil 2190) #19
200F 67LBF 5980RPM 19 FILE: st78ad1

of Points Modified = 3

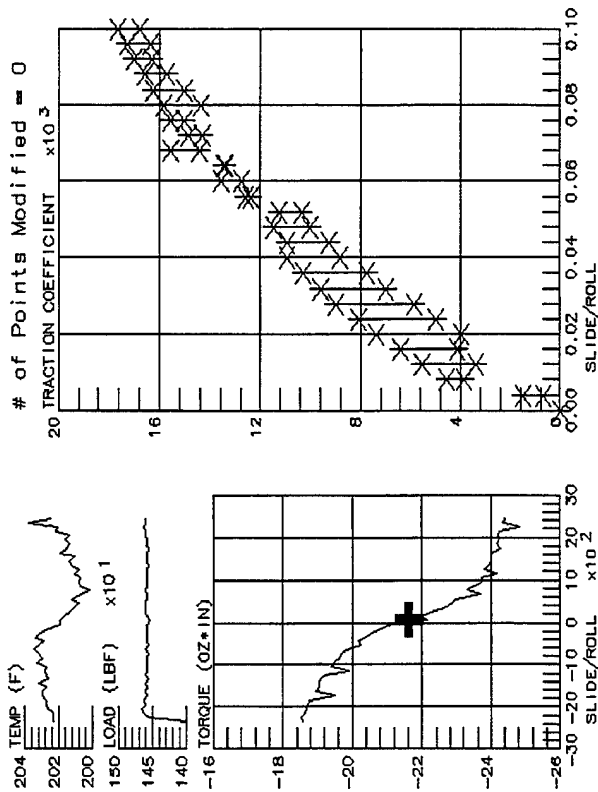


AD Shell ST-78 (Navy Gear Oil 2190) #20
200F 116LBF 5980RPM 20 FILE: st78ad1

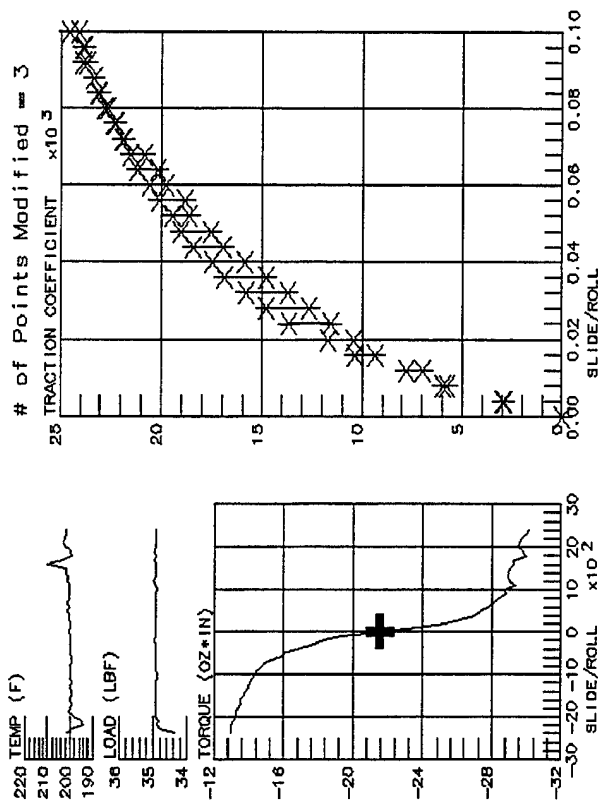
of Points Modified = 1



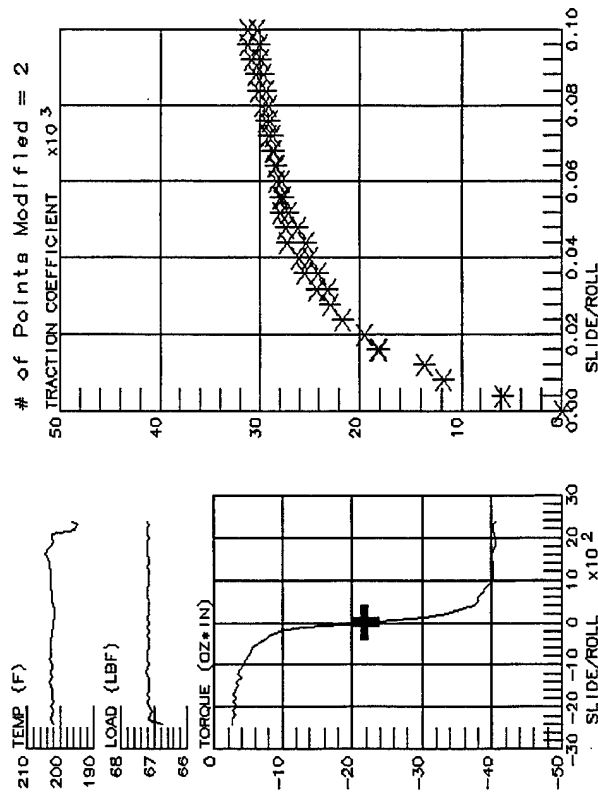
AD Shell ST-78 (Navy Gear Oil 2190) #21
200F 13LBF 7220RPM 21 FILE: st78ad1



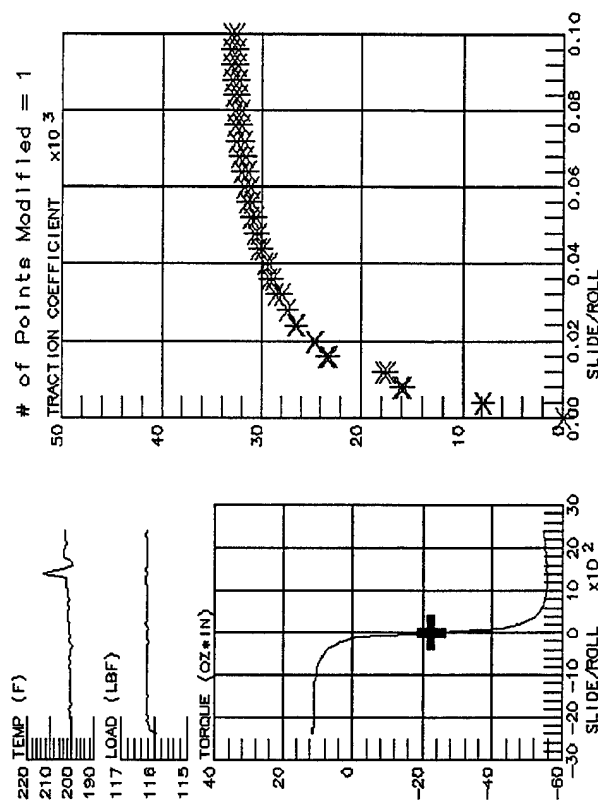
AD Shell ST-78 (Navy Gear Oil 2190) #22
200F 34LBF 7220RPM 22 FILE: st78ad1



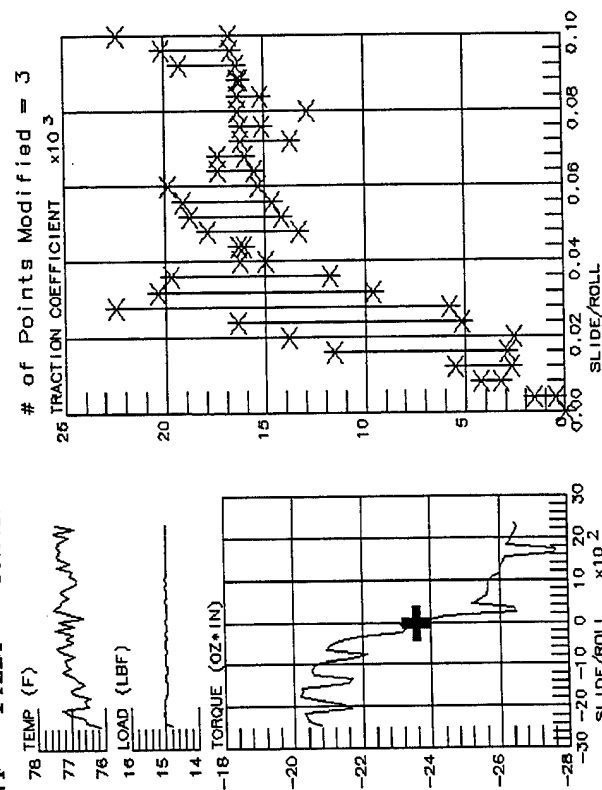
AD Shell ST-78 (Navy Gear Oil 2190) #23
200F 67LBF 7220RPM 23 FILE: st78ad1



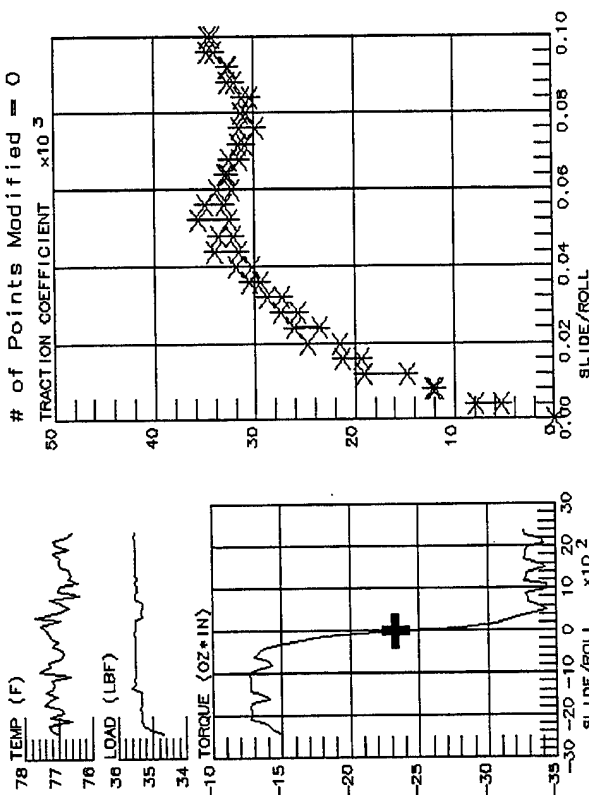
AD Shell ST-78 (Navy Gear Oil 2190) #24
200F 116LBF 7220RPM 24 FILE: st78ad1



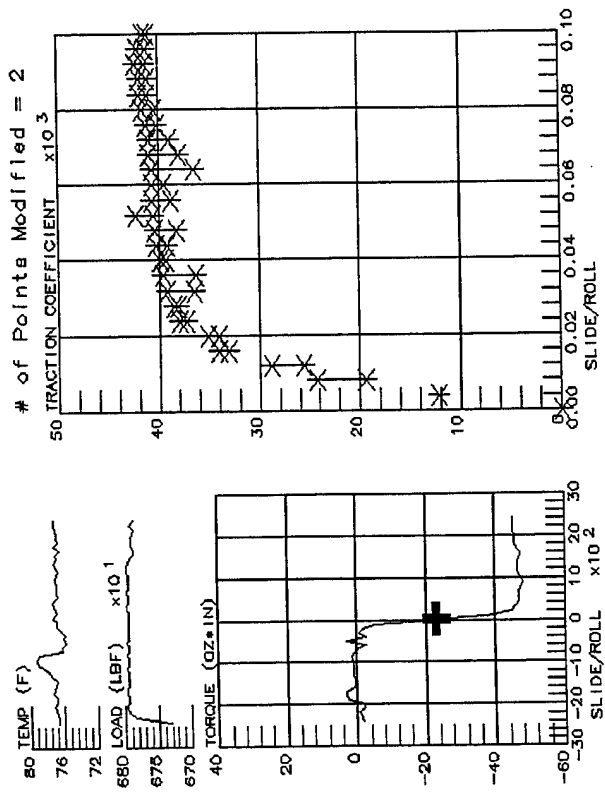
AD Shell ST-78 (Navy Gear Oil 2190) #25
77F 14LBF 4820RPM 1 FILE: st78ad3



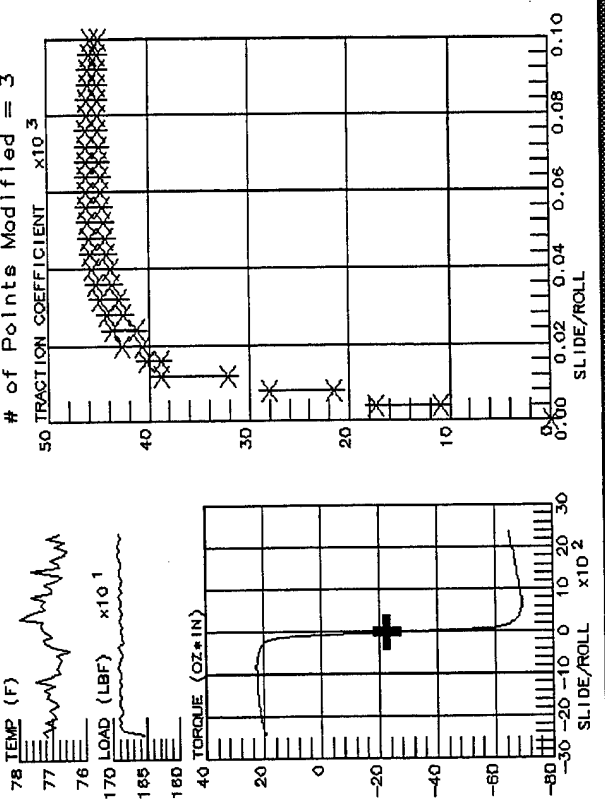
AD Shell ST-78 (Navy Gear Oil 2190) #26
77F 34LBF 4820RPM 2 FILE: st78ad3



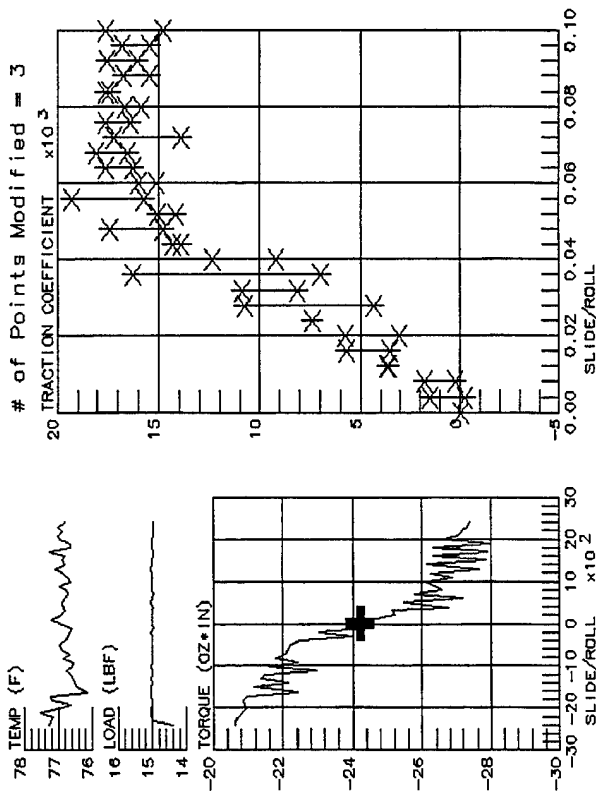
AD Shell ST-78 (Navy Gear Oil 2190) #27
77F 67LBF 4820RPM 3 FILE: st78ad3



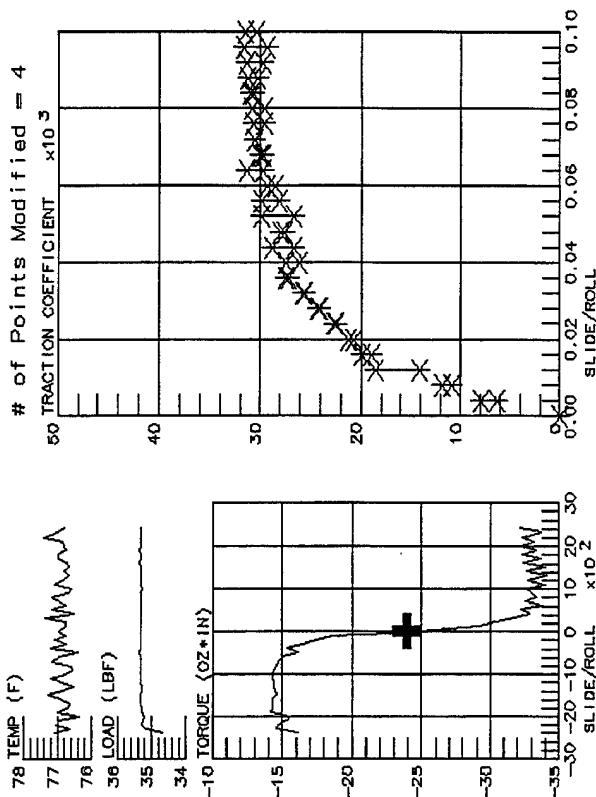
AD Shell ST-78 (Navy Gear Oil 2190) #28
77F 116LBF 4820RPM 4 FILE: st78ad3



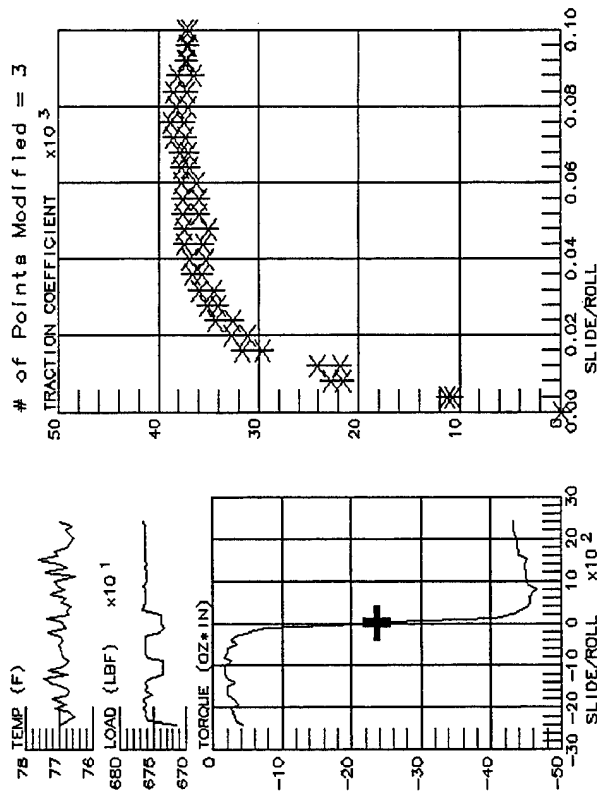
AD Shell ST-78 (Navy Gear Oil 2190) #29
77F 14LBF 5980RPM 6 FILE: st78ad3



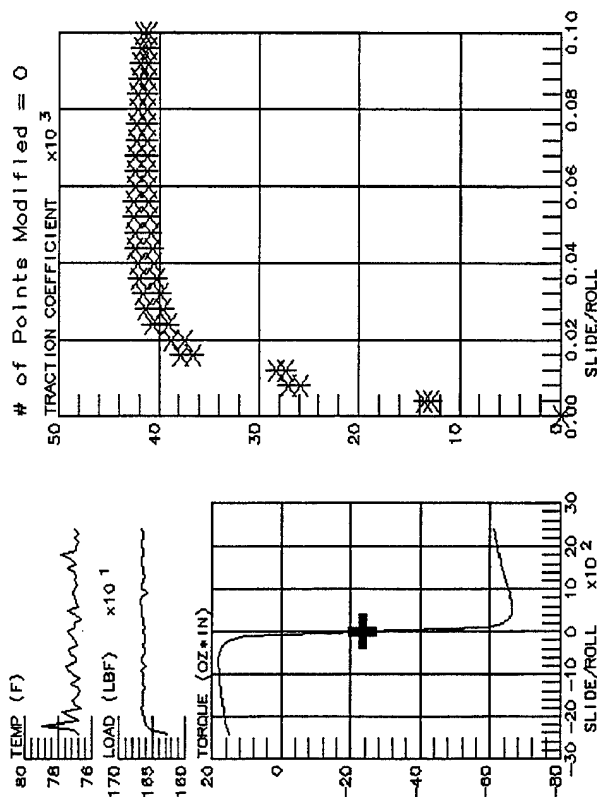
AD Shell ST-78 (Navy Gear Oil 2190) #30
77F 34LBF 5980RPM 6 FILE: st78ad3



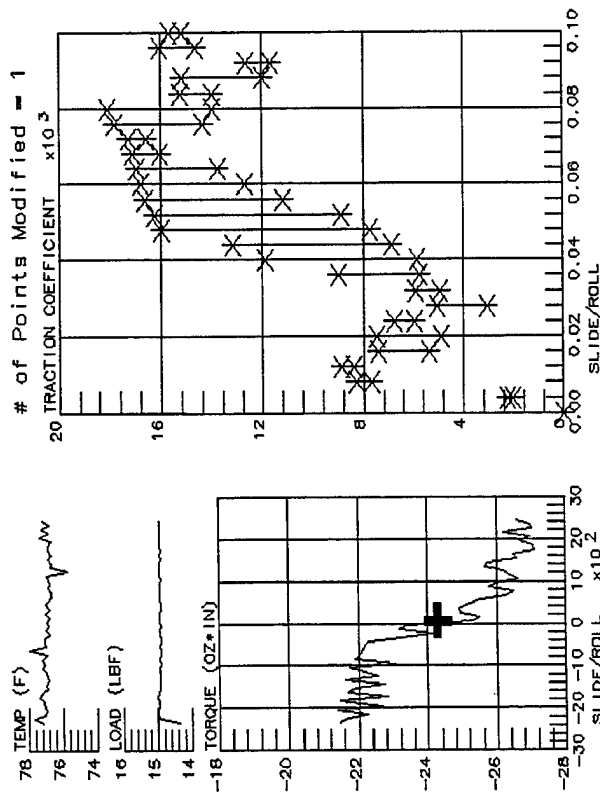
AD Shell ST-78 (Navy Gear Oil 2190) #31
77F 67LBF 5980RPM 7 FILE: st78ad3



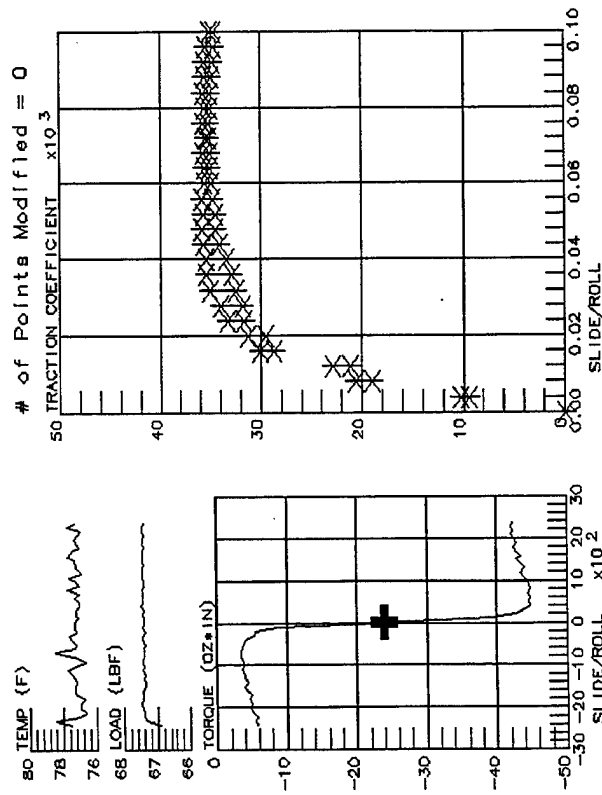
AD Shell ST-78 (Navy Gear Oil 2190) #32
77F 116LBF 5980RPM 8 FILE: st78ad3



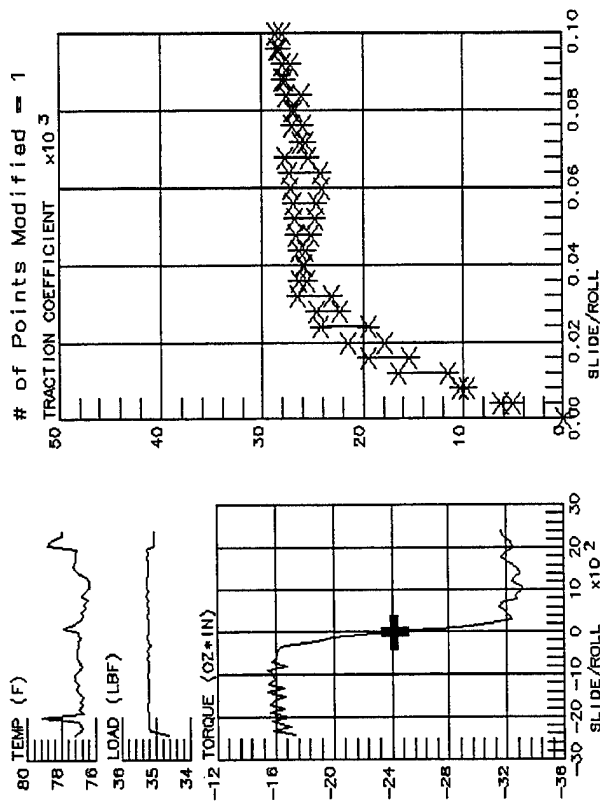
AD Shell ST-78 (Navy Gear Oil 2190) #33
77F 14LBF 7220RPM 9 FILE: st78ad3



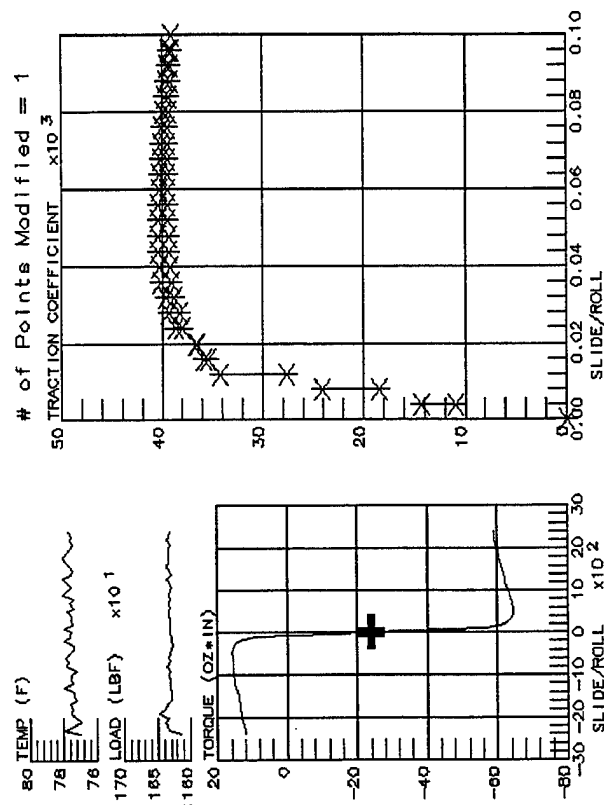
AD Shell ST-78 (Navy Gear Oil 2190) #35
77F 67LBF 7220RPM 11 FILE: st78ad3



AD Shell ST-78 (Navy Gear Oil 2190) #34
77F 34LBF 7220RPM 10 FILE: st78ad3

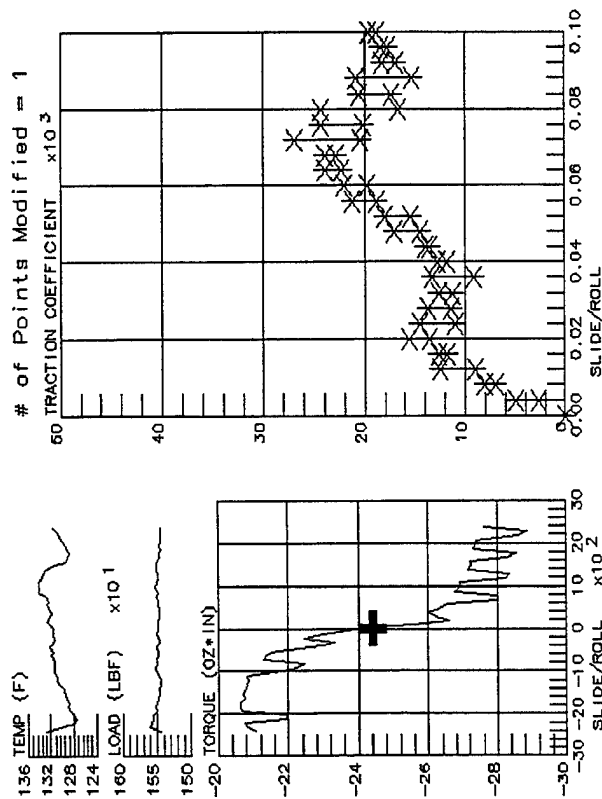


AD Shell ST-78 (Navy Gear Oil 2190) #36
77F 116LBF 7220RPM 12 FILE: st78ad3

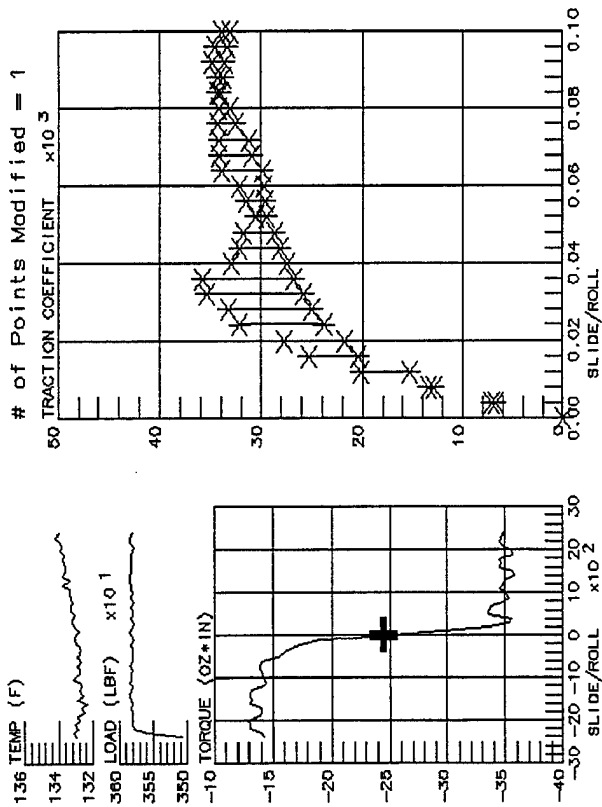


TRACTION MODIFIERS

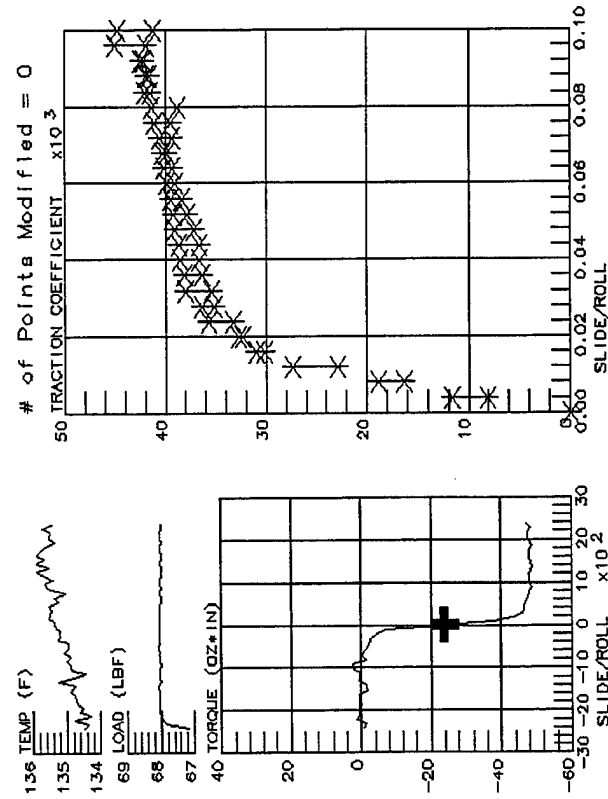
AD Shell ST-78 (Navy Gear Oil 2190) #37
131F 14LBF 4820RPM 13 FILE: st78ad3



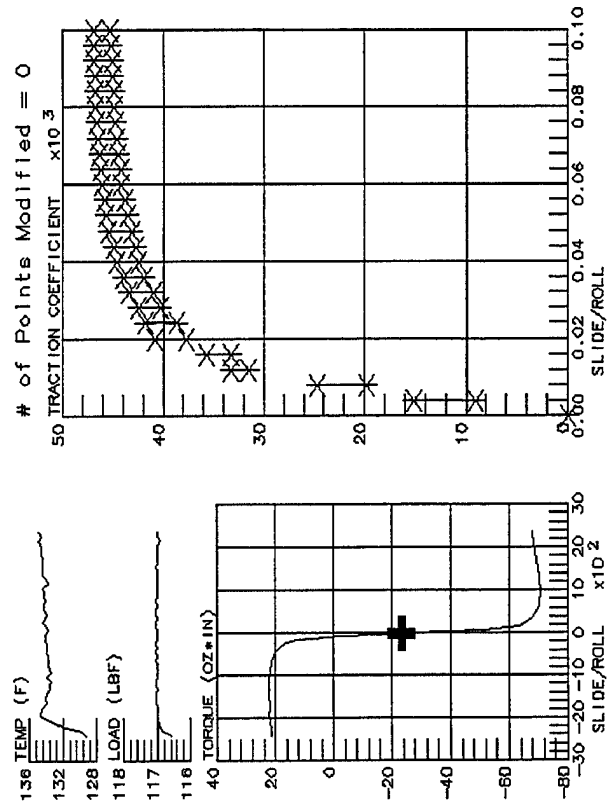
AD Shell ST-78 (Navy Gear Oil 2190) #38
131F 34LBF 4820RPM 14 FILE: st78ad3



AD Shell ST-78 (Navy Gear Oil 2190) #39
131F 67LBF 4820RPM 15 FILE: st78ad3

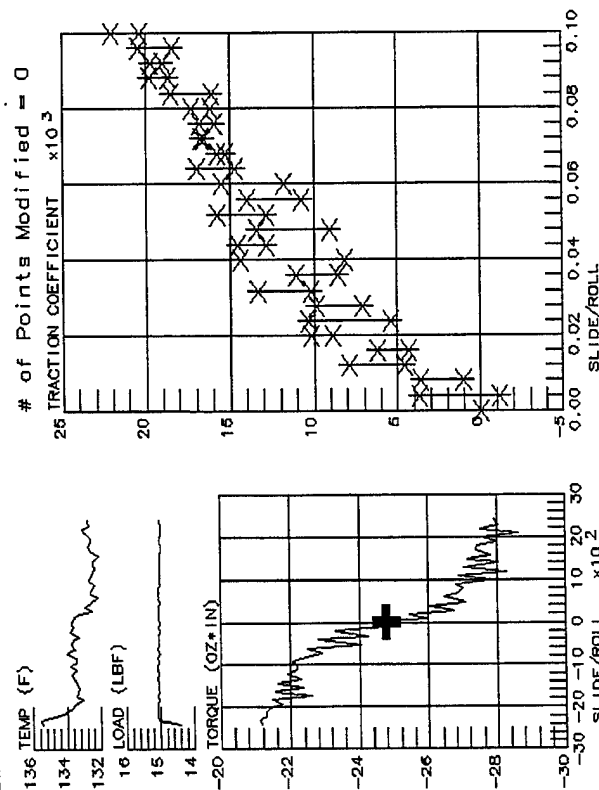


AD Shell ST-78 (Navy Gear Oil 2190) #40
131F 116LBF 4820RPM 16 FILE: st78ad3



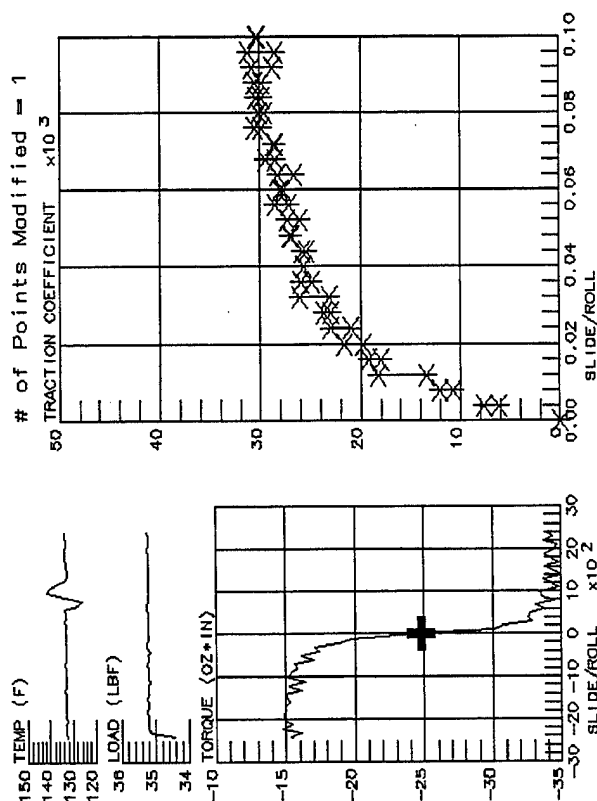
AD Shell ST-78 (Navy Gear Oil 2190) #41
131F 14LBF 5980RPM 17 FILE: st78ad3

of Points Modified = 0



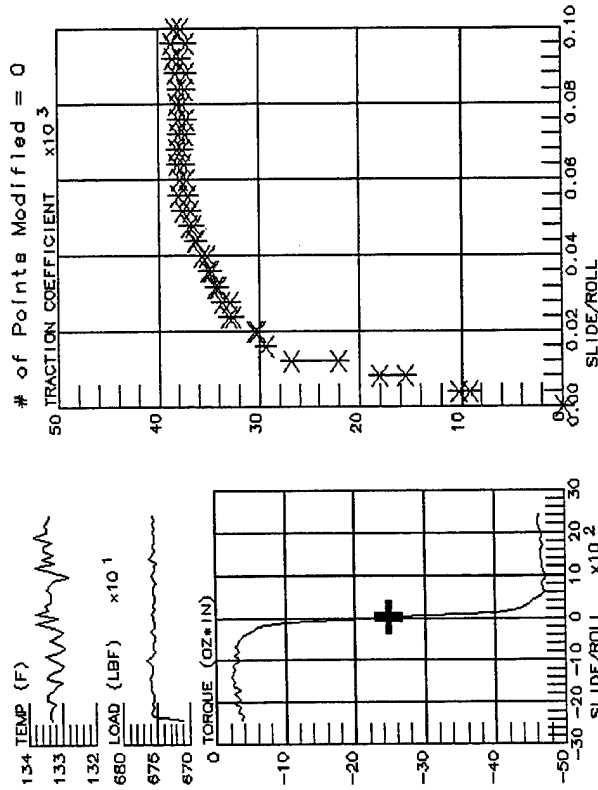
AD Shell ST-78 (Navy Gear Oil 2190) #42
131F 34LBF 5980RPM 18 FILE: st78ad3

of Points Modified = 1



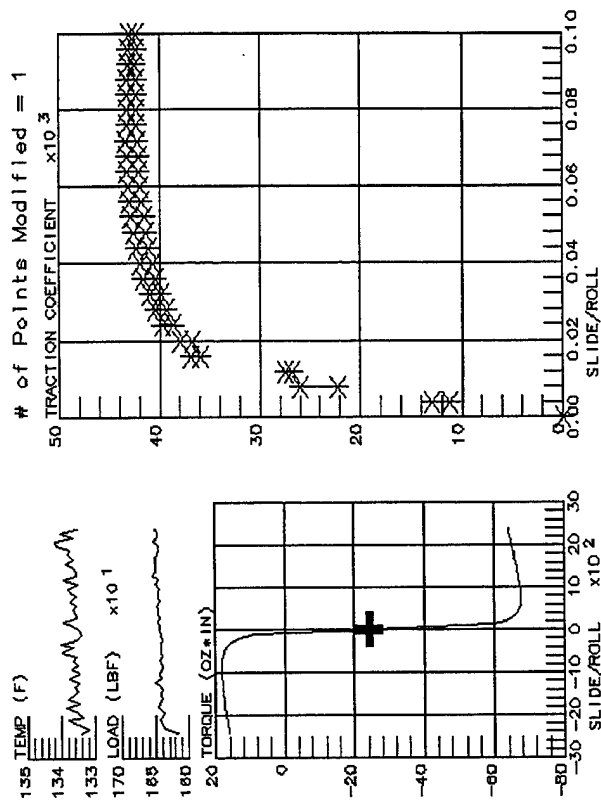
AD Shell ST-78 (Navy Gear Oil 2190) #43
131F 67LBF 5980RPM 19 FILE: st78ad3

of Points Modified = 0



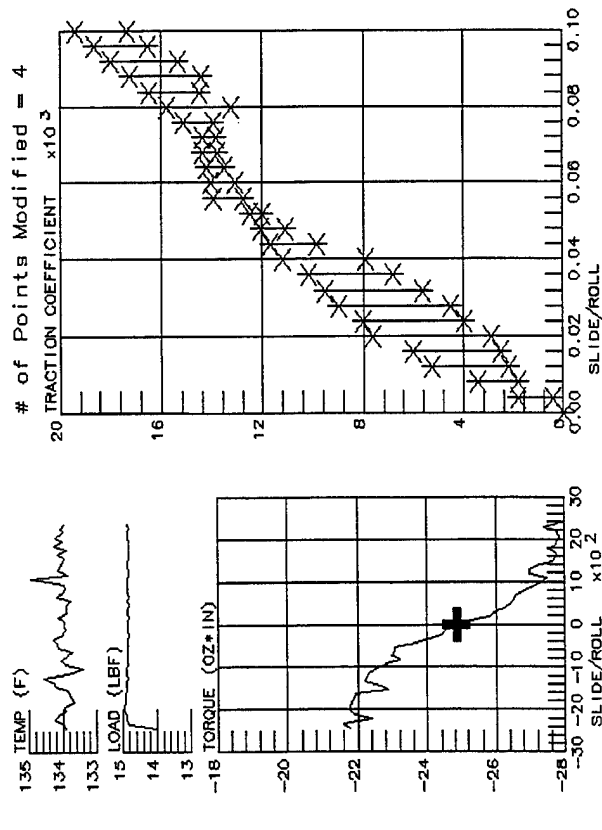
AD Shell ST-78 (Navy Gear Oil 2190) #44
131F 116LBF 5980RPM 20 FILE: st78ad3

of Points Modified = 1

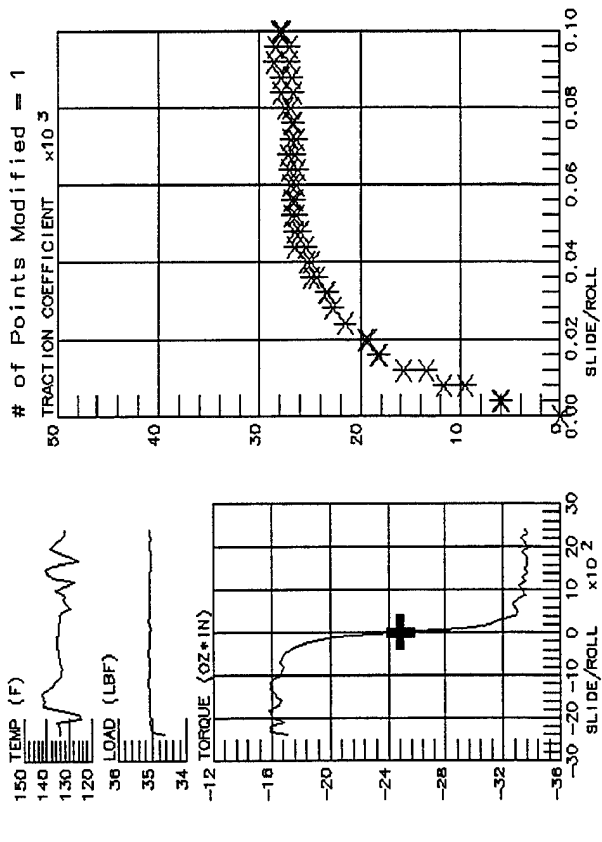


TRACTION MONITORING

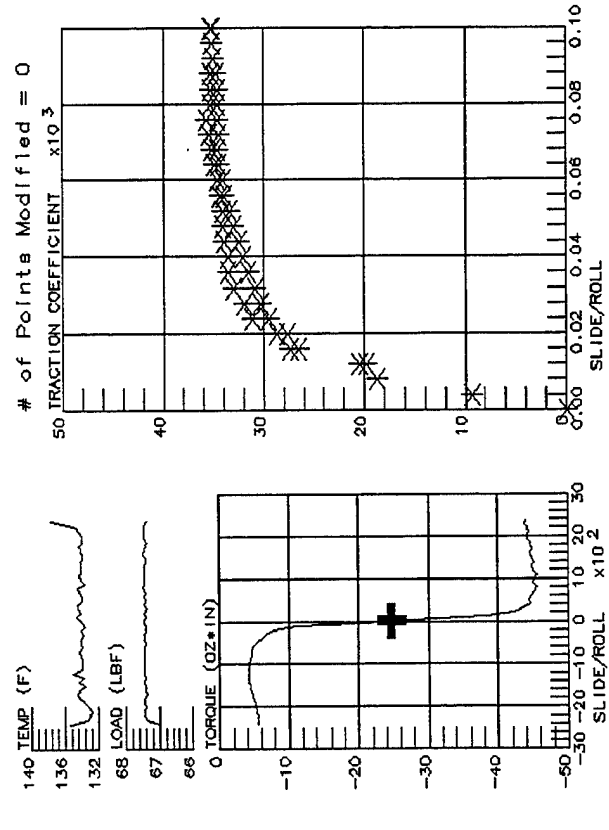
AD Shell ST-78 (Navy Gear Oil 2190) #45
131F 14LBF 7220RPM 21 FILE: st78ad3



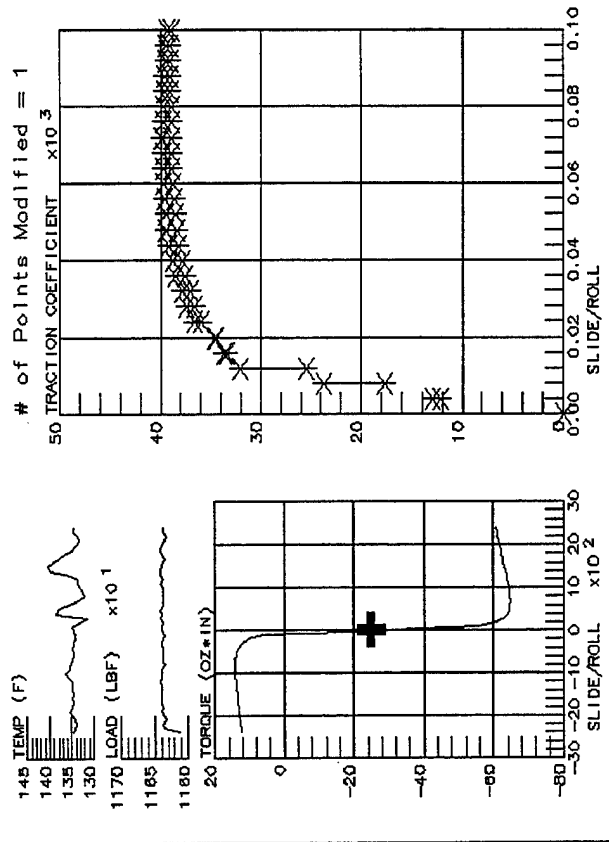
AD Shell ST-78 (Navy Gear Oil 2190) #46
131F 34LBF 7220RPM 22 FILE: st78ad3



AD Shell ST-78 (Navy Gear Oil 2190) #47
131F 67LBF 7220RPM 23 FILE: st78ad3



AD Shell ST-78 (Navy Gear Oil 2190) #48
131F 116LBF 7220RPM 24 FILE: st78ad3



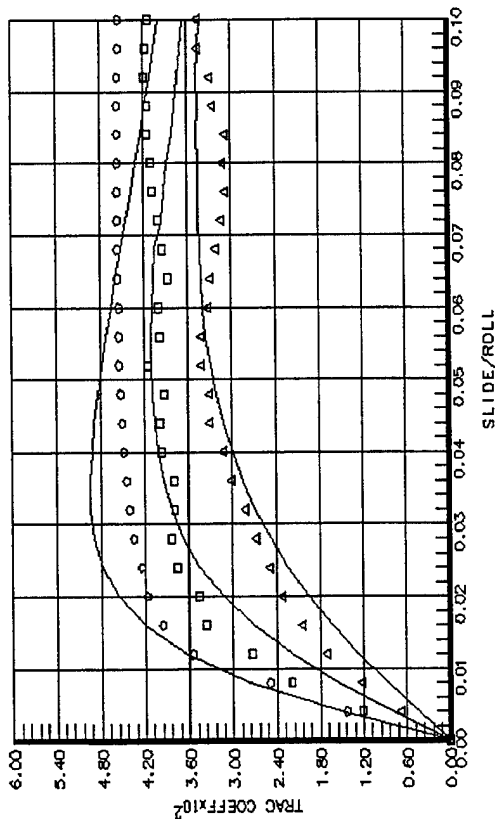
Lubricant name = AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| ad1.dat | 2.9833E+02 | 6.8911E+00 | 6.0669E+00 | 5.5000E-09 | 8.9620E-02 |
| ad2.dat | 2.9833E+02 | 8.5495E+00 | 4.6567E+00 | 5.5000E-09 | 7.7155E-02 |
| ad3.dat | 2.9833E+02 | 1.0322E+01 | 3.7533E+00 | 5.5000E-09 | 6.8398E-02 |
| ad4.dat | 3.1333E+02 | 6.8911E+00 | 4.7140E+00 | 5.5000E-09 | 1.2401E-01 |
| ad5.dat | 3.1333E+02 | 8.5495E+00 | 3.7696E+00 | 5.5000E-09 | 1.0338E-01 |
| ad6.dat | 3.1333E+02 | 1.0322E+01 | 3.0152E+00 | 5.5000E-09 | 8.8534E-02 |
| ad7.dat | 3.2833E+02 | 6.8911E+00 | 3.4545E+00 | 5.5000E-09 | 1.6256E-01 |
| ad8.dat | 3.2833E+02 | 8.5495E+00 | 2.5091E+00 | 5.5000E-09 | 1.2599E-01 |
| ad9.dat | 3.2833E+02 | 1.0322E+01 | 2.2268E+00 | 5.5000E-09 | 1.1133E-01 |
| ad11.dat | 3.6667E+02 | 8.5495E+00 | 5.3618E-01 | 5.5000E-09 | 2.6345E-01 |
| ad12.dat | 3.6667E+02 | 1.0322E+01 | 5.8237E-01 | 5.5000E-09 | 2.1335E-01 |

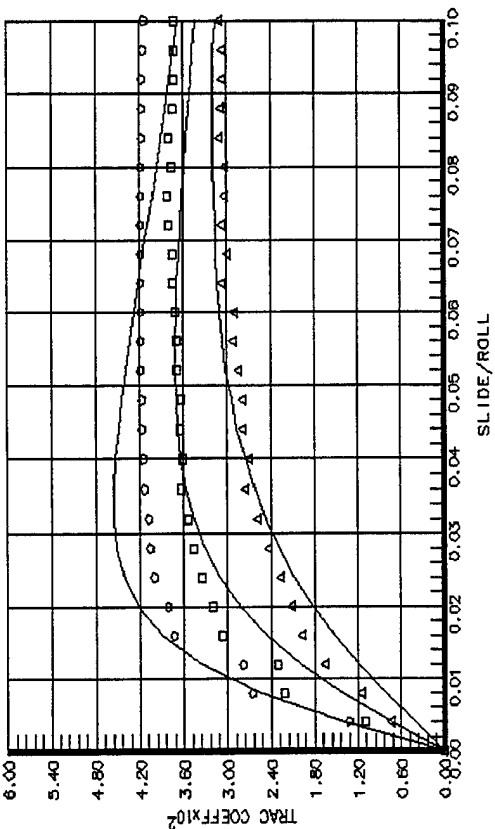
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE I _{add.dat} XMU* ALFA* BETA*
 Δ 684MPA 151N 6.89N/S 298K # 25 6.067E+00 5.500E-09 8.982E-02
 □ 849MPA 298N 6.89N/S 298K # 27 6.067E+00 5.500E-09 8.982E-02
 ○ 1019MPA 516N 6.89N/S 298K # 28 6.067E+00 5.500E-09 8.982E-02



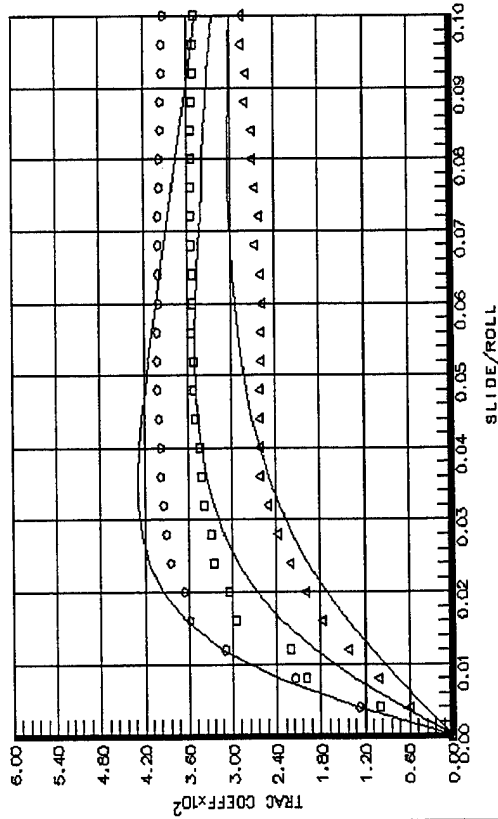
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE I _{add.dat} XMU* ALFA* BETA*
 Δ 684MPA 151N 8.55M/S 298K # 30 4.857E+00 5.500E-09 7.715E-02
 □ 849MPA 298N 8.55M/S 298K # 31 4.857E+00 5.500E-09 7.715E-02
 ○ 1018MPA 516N 8.55M/S 298K # 32 4.857E+00 5.500E-09 7.715E-02



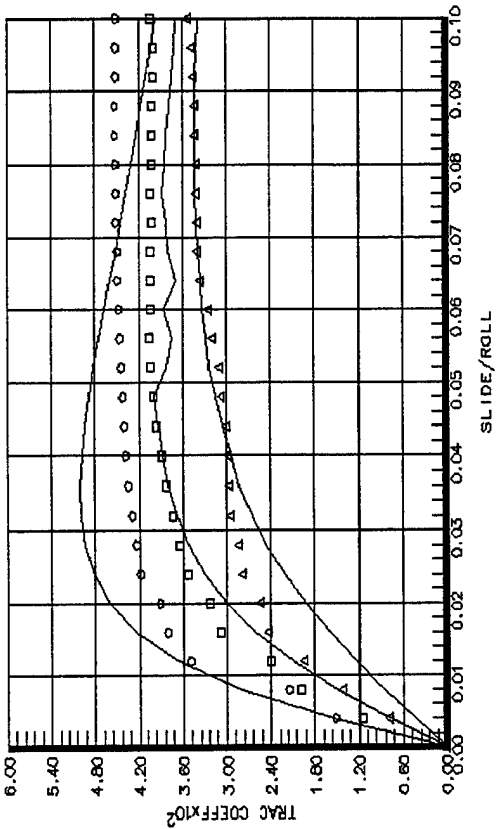
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE I _{add.dat} XMU* ALFA* BETA*
 Δ 683MPA 151N 10.32M/S 298K # 34 3.753E+00 5.500E-09 6.840E-02
 □ 849MPA 298N 10.32M/S 298K # 35 3.753E+00 5.500E-09 6.840E-02
 ○ 1017MPA 516N 10.32M/S 298K # 36 3.753E+00 5.500E-09 6.840E-02



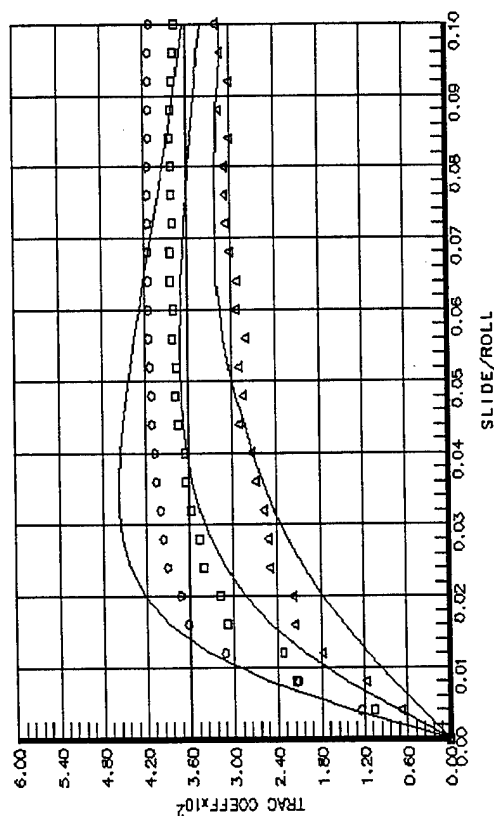
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE I _{add.dat} XMU* ALFA* BETA*
 Δ 684MPA 151N 6.89M/S 313K # 2 4.714E+00 5.500E-09 1.240E-01
 □ 848MPA 298N 6.89M/S 313K # 3 4.714E+00 5.500E-09 1.240E-01
 ○ 1017MPA 516N 6.89M/S 313K # 4 4.714E+00 5.500E-09 1.240E-01



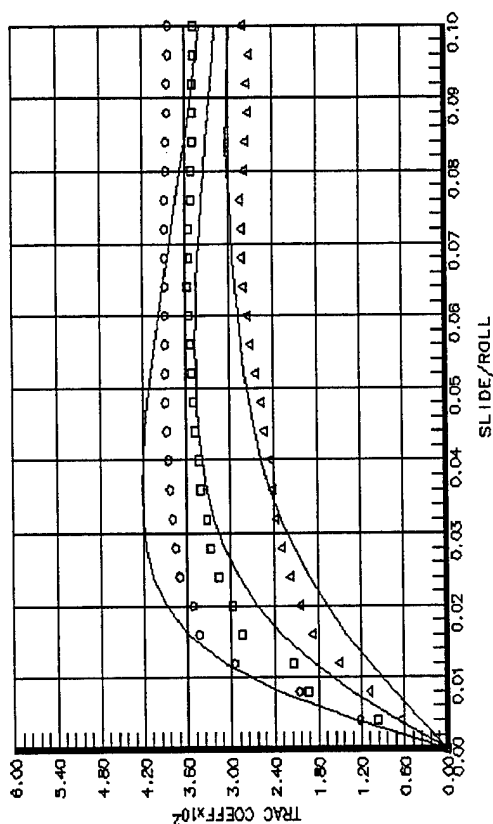
AD Shell ST-78 (Navy Gear Oil 2190)

| NEWTONIAN MODEL | TYPE 1 | $\epsilon_{45, \text{det}}$ | XMU* | ALFA* | BETA* |
|-----------------|--------|-----------------------------|----------|-----------|-----------|
| 681MPa | 151N | 8.55M/S | 313K # 8 | 3.770E+00 | 5.800E-09 |
| 847MPa | 298N | 8.55M/S | 313K # 8 | 3.770E+00 | 5.800E-09 |
| 1017MPa | 438N | 8.55M/S | 313K # 8 | 3.770E+00 | 5.800E-09 |



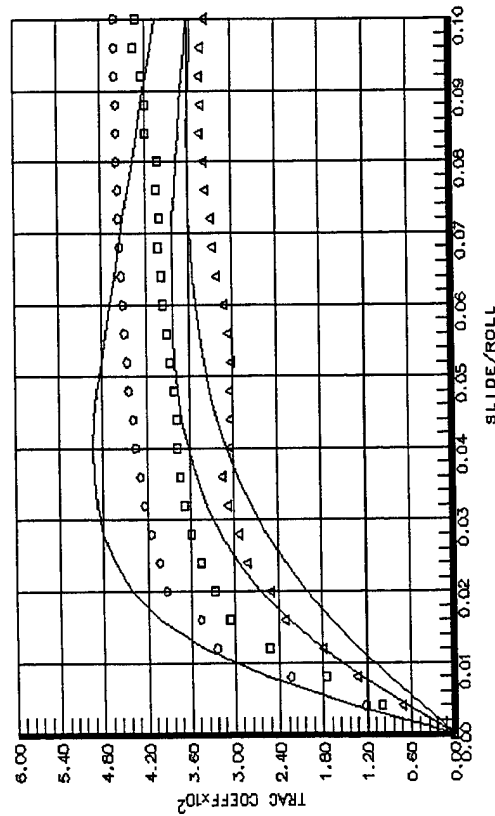
AD Shell ST-78 (Navy Gear Oil 2190)

| NEWTONIAN MODEL | TYPE I | ad6.dat | XMU* | ALFA* | BETA* |
|-----------------|----------|---------|------|----------|----------|
| 151N | 10.32M/S | 313K | # 10 | 3.01E+00 | 8.83E-02 |
| 680MPA | 10.32M/S | 313K | # 11 | 3.01E+00 | 8.83E-02 |
| 847MPA | 10.32M/S | 313K | # 12 | 3.01E+00 | 8.83E-02 |
| 1016MPA | 10.32M/S | 313K | # 13 | 3.01E+00 | 8.83E-02 |



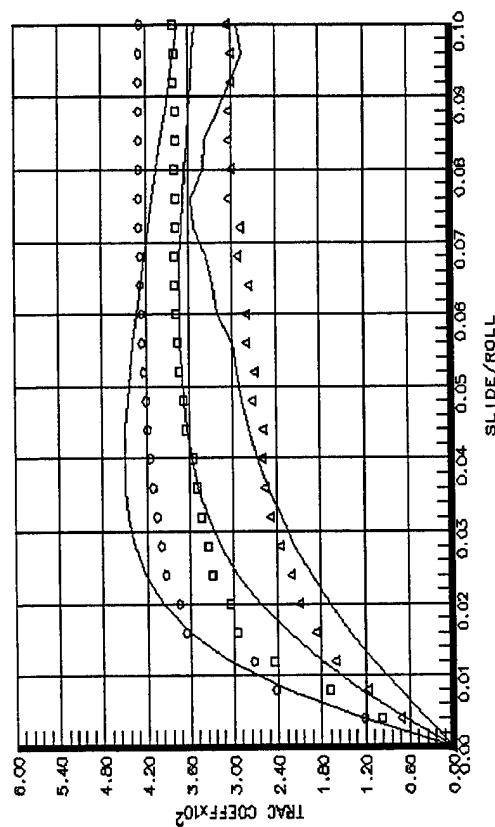
AD Shell ST-78 (Navv Gear Oil 2190)

| ADJ. SHEAR STRESS | TYPE | Y | XMU* | ALFA* | BETA* |
|-------------------|---------|------|------|------------|-----------|
| NEWTONIAN MODEL | | | | | |
| 151N | 6.89M/S | 328K | # 38 | 3.4355E+00 | 5.500E-09 |
| 687WPA | 6.89M/S | 328K | # 39 | 3.4355E+00 | 5.500E-09 |
| 850WPA | 6.89M/S | 328K | # 40 | 3.4355E+00 | 5.500E-09 |
| 516N | 6.89M/S | 328K | # 41 | 3.4355E+00 | 5.500E-09 |
| 80WPA | 6.89M/S | 328K | # 42 | 3.4355E+00 | 5.500E-09 |



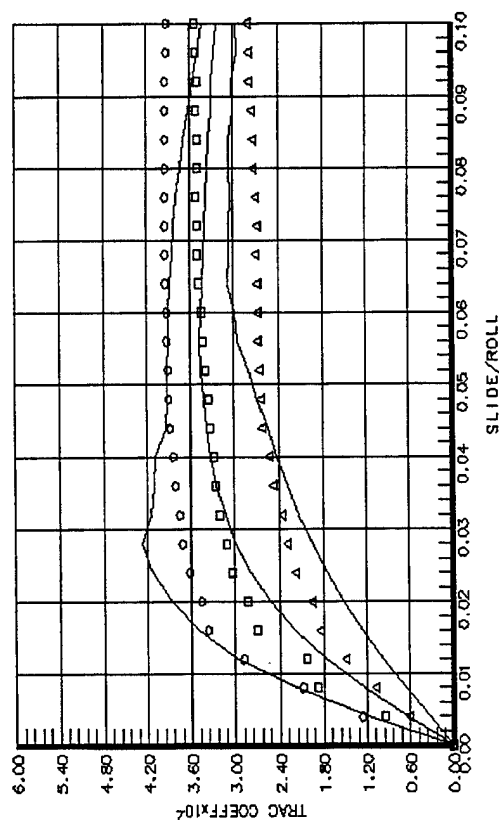
AD Shell ST-78 (Navy Gear Oil 2190)

| NEWTONIAN MODEL | | TYPE 1 | ad8.dat | | XMU* | | ALFA* | BETA* |
|-----------------|---------|--------|---------|-----------|-----------|-----------|-----------|-------|
| Δ | 683MPa | 151N | 8.55M/S | 328K # 42 | 2.509E+00 | 5.500E-09 | 1.280E-01 | |
| Δ | 848MPa | 288N | 8.55M/S | 328K # 43 | 2.509E+00 | 5.500E-09 | 1.280E-01 | |
| Δ | 1017MPa | 516N | 8.55M/S | 328K # 44 | 2.509E+00 | 5.500E-09 | 1.280E-01 | |



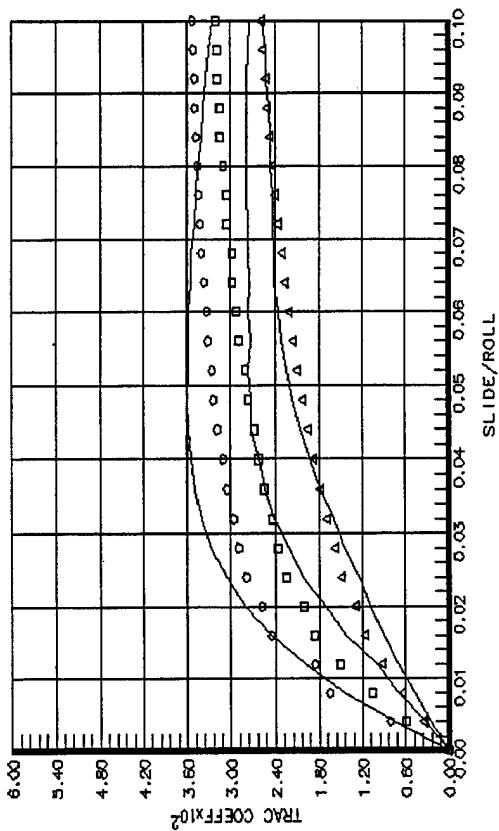
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE 1 $\mu_{ad1}.dat$ XMU* ALFA* BETA*
 151N 10.32M/S 328K # 45 2.227E+00 5.500E-09 1.113E-01
 298N 10.32M/S 328K # 46 2.227E+00 5.500E-09 1.113E-01
 516N 10.32M/S 328K # 48 2.227E+00 5.500E-09 1.113E-01



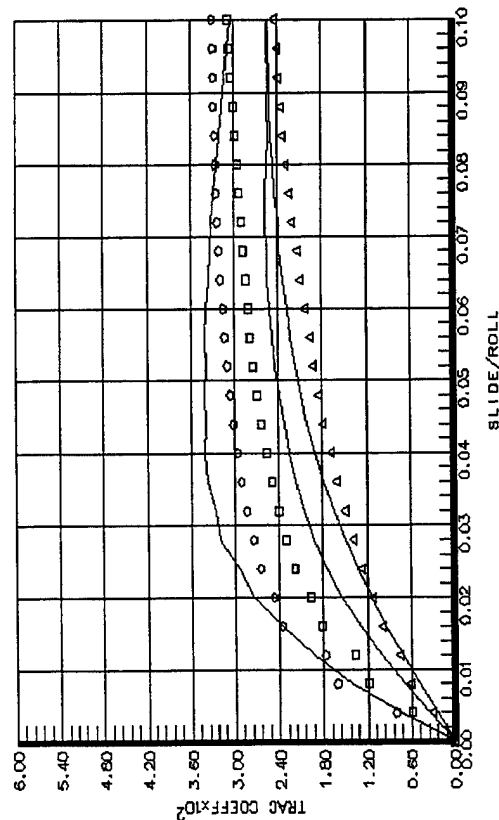
AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE 1 $\mu_{ad1}.dat$ XMU* ALFA* BETA*
 151N 8.55M/S 367K # 18 5.362E-01 5.500E-09 2.635E-01
 298N 8.55M/S 367K # 19 5.362E-01 5.500E-09 2.635E-01
 516N 8.55M/S 367K # 20 5.362E-01 5.500E-09 2.635E-01



AD Shell ST-78 (Navy Gear Oil 2190)

NEWTONIAN MODEL TYPE 1 $\mu_{ad2}.dat$ XMU* ALFA* BETA*
 151N 10.32M/S 367K # 22 5.824E-01 5.500E-09 2.133E-01
 298N 10.32M/S 367K # 23 5.824E-01 5.500E-09 2.133E-01
 516N 10.32M/S 367K # 24 5.824E-01 5.500E-09 2.133E-01



5. Traction Data Set D: 89-105 Coray 100 New

Data set name: BB 89-105 Coray 100 new
 Rolling radii [Disks 1 & 2] (in): 0.75 0.75
 Crown radii [Disks 1 & 2] (in): 10.50 8.10

Number of data sets found = 108

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 75.00 | 1.35 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.76E-06 | bb75a #1 |
| 2 | 75.00 | 4.90 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.79E-05 | bb75a #2 |
| 3 | 75.00 | 9.16 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.14E-04 | bb75a #3 |
| 4 | 75.00 | 22.65 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.79E-04 | bb75a #4 |
| 5 | 75.00 | 43.95 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.27E-04 | bb75a #5 |
| 6 | 75.00 | 75.19 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.19E-03 | bb75a #6 |
| 7 | 75.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.22E-04 | bb75b #1 |
| 8 | 75.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.56E-06 | bb75b #2 |
| 9 | 75.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.05E-06 | bb75b #3 |
| 10 | 75.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.92E-06 | bb75b #4 |
| 11 | 75.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.19E-05 | bb75b #5 |
| 12 | 75.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.31E-04 | bb75b #6 |
| 13 | 75.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.10E-04 | bb75c #1 |
| 14 | 75.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.27E-06 | bb75c #2 |
| 15 | 75.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.20E-07 | bb75c #3 |
| 16 | 75.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.78E-05 | bb75c #4 |
| 17 | 75.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.72E-05 | bb75c #5 |
| 18 | 75.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.95E-04 | bb75c #6 |
| 19 | 75.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.21E-03 | bb75d #1 |
| 20 | 75.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.80E-06 | bb75d #2 |
| 21 | 75.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.83E-06 | bb75d #3 |
| 22 | 75.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.22E-05 | bb75d #4 |
| 23 | 75.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.57E-06 | bb75d #5 |
| 24 | 75.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.76E-05 | bb75d #6 |
| 25 | 75.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.17E-03 | bb75e #1 |
| 26 | 75.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.95E-06 | bb75e #2 |
| 27 | 75.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.15E-06 | bb75e #3 |
| 28 | 75.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.45E-06 | bb75e #4 |
| 29 | 75.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.58E-05 | bb75e #5 |
| 30 | 75.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.27E-04 | bb75e #6 |
| 31 | 100.00 | 1.35 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.79E-05 | bb100a #1 |
| 32 | 100.00 | 4.90 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.48E-05 | bb100a #2 |
| 33 | 100.00 | 9.16 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.16E-04 | bb100a #3 |
| 34 | 100.00 | 22.65 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.52E-04 | bb100a #4 |
| 35 | 100.00 | 43.95 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.10E-04 | bb100a #5 |
| 36 | 100.00 | 75.19 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.64E-03 | bb100a #6 |
| 37 | 100.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.07E-04 | bb100b #1 |
| 38 | 100.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.85E-06 | bb100b #2 |
| 39 | 100.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.39E-05 | bb100b #3 |
| 40 | 100.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.12E-05 | bb100b #4 |
| 41 | 100.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.68E-05 | bb100b #5 |
| 42 | 100.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.26E-04 | bb100b #6 |
| 43 | 100.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.16E-05 | bb100c #1 |
| 44 | 100.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.83E-06 | bb100c #2 |
| 45 | 100.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.02E-07 | bb100c #3 |
| 46 | 100.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.12E-06 | bb100c #4 |
| 47 | 100.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.47E-05 | bb100c #5 |
| 48 | 100.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.42E-04 | bb100c #6 |
| 49 | 100.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.27E-04 | bb100d #1 |
| 50 | 100.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.49E-06 | bb100d #2 |

Data set: BB 89-105 Coray 100 newcontinued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.55E-05 | bb100d #3 |
| 52 | 100.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.54E-06 | bb100d #4 |
| 53 | 100.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.44E-06 | bb100d #5 |
| 54 | 100.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.12E-04 | bb100d #6 |
| 55 | 100.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.30E-04 | bb100e #1 |
| 56 | 100.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.72E-05 | bb100e #2 |
| 57 | 100.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.54E-05 | bb100e #3 |
| 58 | 100.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.14E-05 | bb100e #4 |
| 59 | 100.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.01E-05 | bb100e #5 |
| 60 | 100.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.59E-04 | bb100e #6 |
| 61 | 120.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.19E-05 | bb120b #1 |
| 62 | 120.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.15E-06 | bb120b #2 |
| 63 | 120.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.05E-05 | bb120b #3 |
| 64 | 120.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.61E-05 | bb120b #4 |
| 65 | 120.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.14E-05 | bb120b #5 |
| 66 | 120.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.11E-04 | bb120b #6 |
| 67 | 120.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.05E-05 | bb120c #1 |
| 68 | 120.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.58E-06 | bb120c #2 |
| 69 | 120.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.64E-06 | bb120c #3 |
| 70 | 120.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.21E-06 | bb120c #4 |
| 71 | 120.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.32E-04 | bb120c #5 |
| 72 | 120.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.52E-04 | bb120c #6 |
| 73 | 120.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.16E-04 | bb120d #1 |
| 74 | 120.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.41E-06 | bb120d #2 |
| 75 | 120.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.83E-06 | bb120d #3 |
| 76 | 120.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.98E-06 | bb120d #4 |
| 77 | 120.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.02E-06 | bb120d #5 |
| 78 | 120.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.17E-04 | bb120d #6 |
| 79 | 120.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.29E-05 | bb120e #1 |
| 80 | 120.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.84E-05 | bb120e #2 |
| 81 | 120.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.36E-05 | bb120e #3 |
| 82 | 120.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.07E-05 | bb120e #4 |
| 83 | 120.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.93E-05 | bb120e #5 |
| 84 | 120.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.64E-05 | bb120e #6 |
| 85 | 180.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.75E-05 | bb180b #1 |
| 86 | 180.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.04E-05 | bb180b #2 |
| 87 | 180.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.01E-06 | bb180b #3 |
| 88 | 180.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.64E-05 | bb180b #4 |
| 89 | 180.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.73E-05 | bb180b #5 |
| 90 | 180.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.24E-04 | bb180b #6 |
| 91 | 180.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.99E-05 | bb180c #1 |
| 92 | 180.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.14E-06 | bb180c #2 |
| 93 | 180.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.59E-06 | bb180c #3 |
| 94 | 180.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.36E-05 | bb180c #4 |
| 95 | 180.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.55E-05 | bb180c #5 |
| 96 | 180.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.44E-05 | bb180c #6 |
| 97 | 180.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.96E-04 | bb180d #1 |
| 98 | 180.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.38E-06 | bb180d #2 |
| 99 | 180.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.39E-05 | bb180d #3 |
| 100 | 180.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.64E-06 | bb180d #4 |
| 101 | 180.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.05E-06 | bb180d #5 |
| 102 | 180.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.99E-05 | bb180d #6 |
| 103 | 180.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.40E-04 | bb180e #1 |
| 104 | 180.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.98E-05 | bb180e #2 |
| 105 | 180.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.26E-05 | bb180e #3 |
| 106 | 180.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.17E-06 | bb180e #4 |
| 107 | 180.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.46E-05 | bb180e #5 |
| 108 | 180.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.39E-04 | bb180e #6 |

Summary of Select Data Files

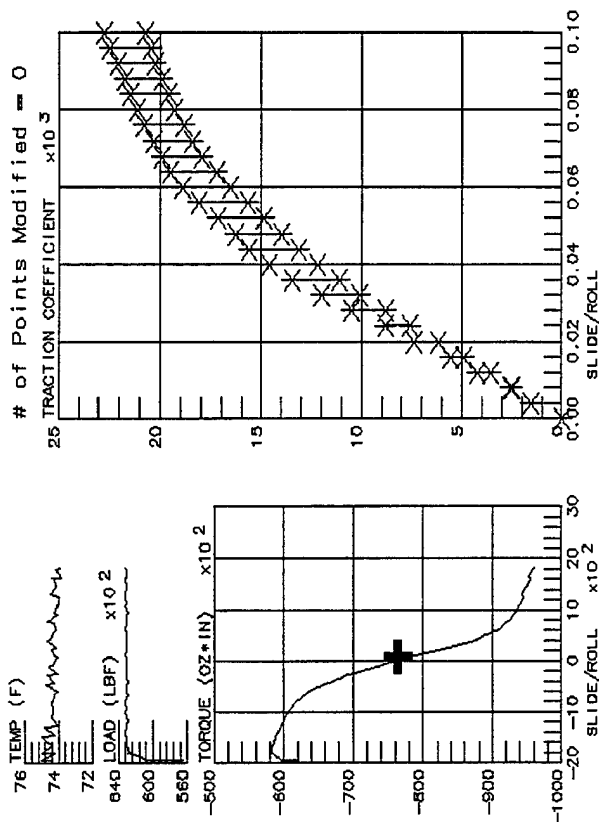
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| bb2.dat | 75.00 | 3820.00 | 22 23 24 |
| bb3.dat | 75.00 | 5093.00 | 28 29 30 |
| bb4.dat | 100.00 | 2546.00 | 46 47 48 |
| bb5.dat | 100.00 | 3820.00 | 52 53 54 |
| bb6.dat | 100.00 | 5093.00 | 58 59 60 |
| bb7.dat | 120.00 | 2546.00 | 70 71 72 |
| bb8.dat | 120.00 | 3820.00 | 76 77 78 |
| bb9.dat | 120.00 | 5093.00 | 82 83 84 |
| bb10.dat | 180.00 | 2546.00 | 94 95 96 |
| bb11.dat | 180.00 | 3820.00 | 100 101 102 |
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#2

BB 89-105 Coray 100 new

75F 5LBF 263RPM 2 FILE: bb75a

of Points Modified = 0

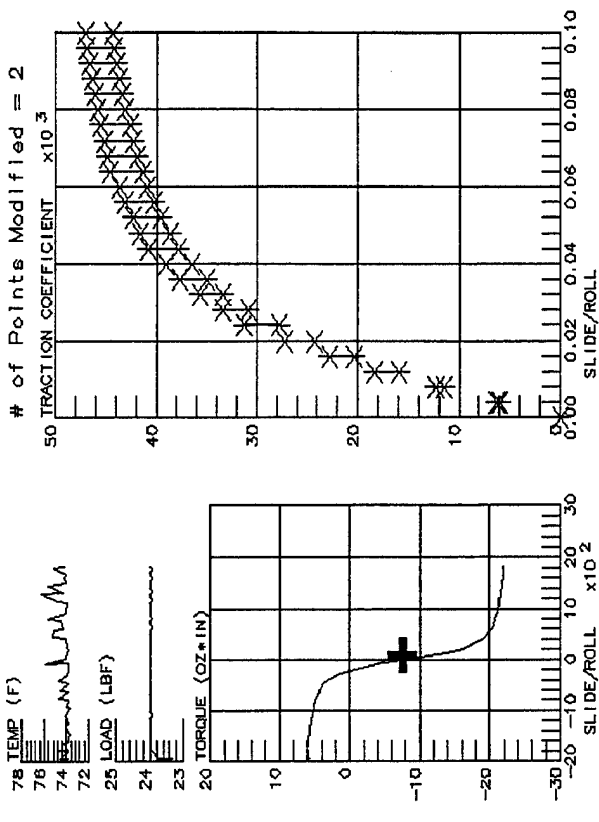


#4

BB 89-105 Coray 100 new

75F 23LBF 263RPM 4 FILE: bb75a

of Points Modified = 2

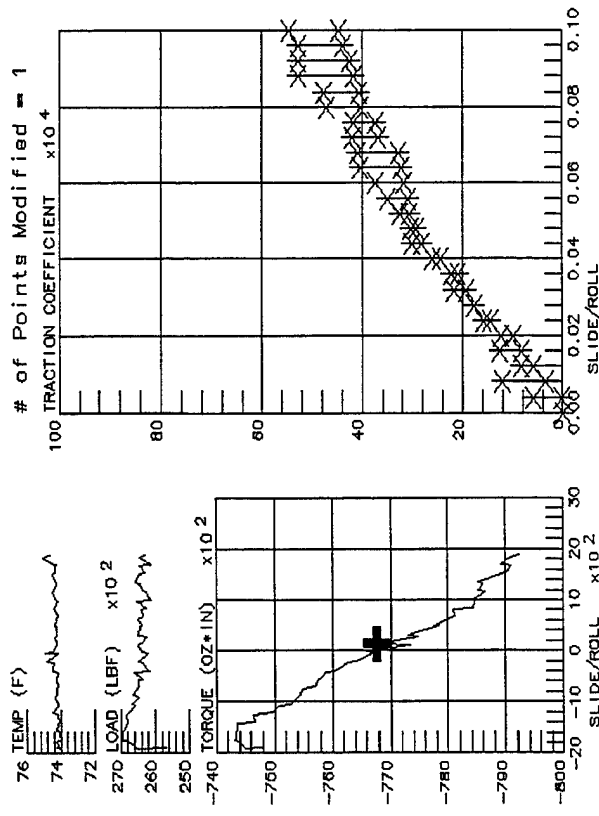


#1

BB 89-105 Coray 100 new

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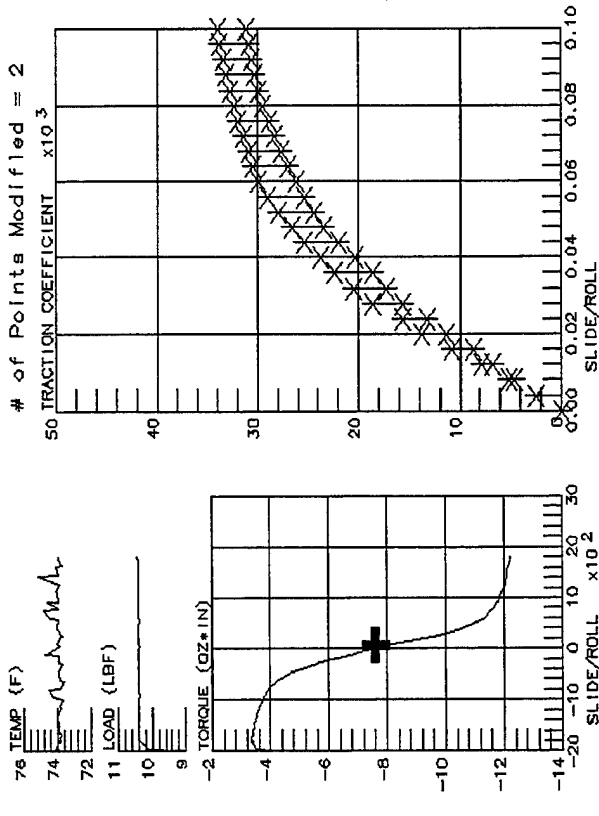


#3

BB 89-105 Coray 100 new

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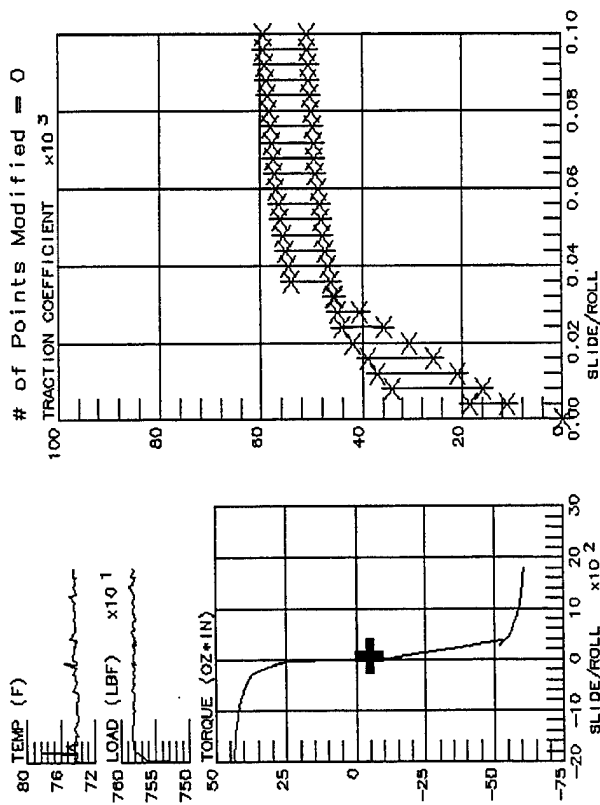
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#6

BB 89-105 Coray 100 new
75F 75LBF 283RPM 6 FILE: bb75a

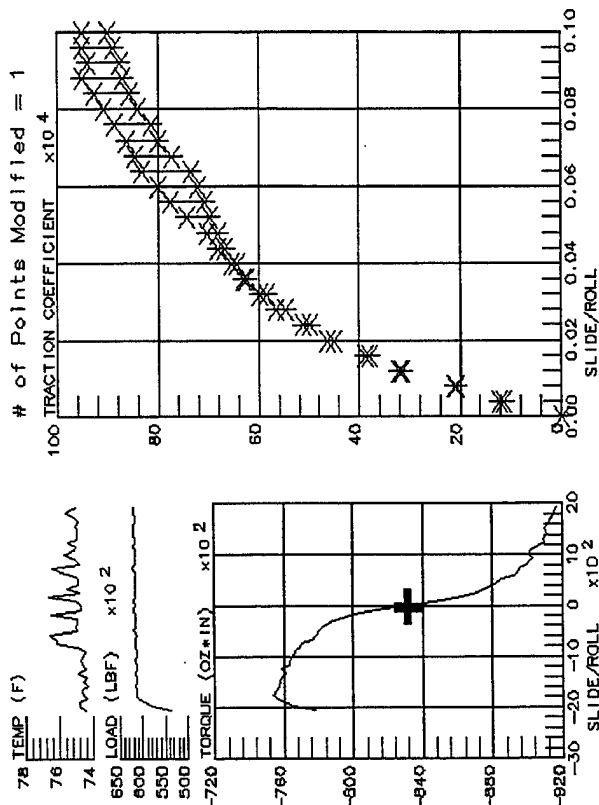
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#6

BB 89-105 Coray 100 new
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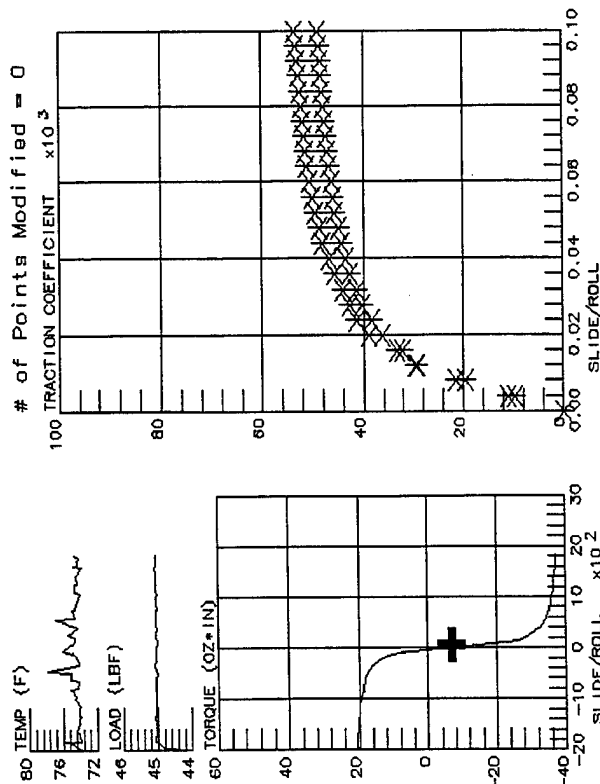
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#5

BB 89-105 Coray 100 new
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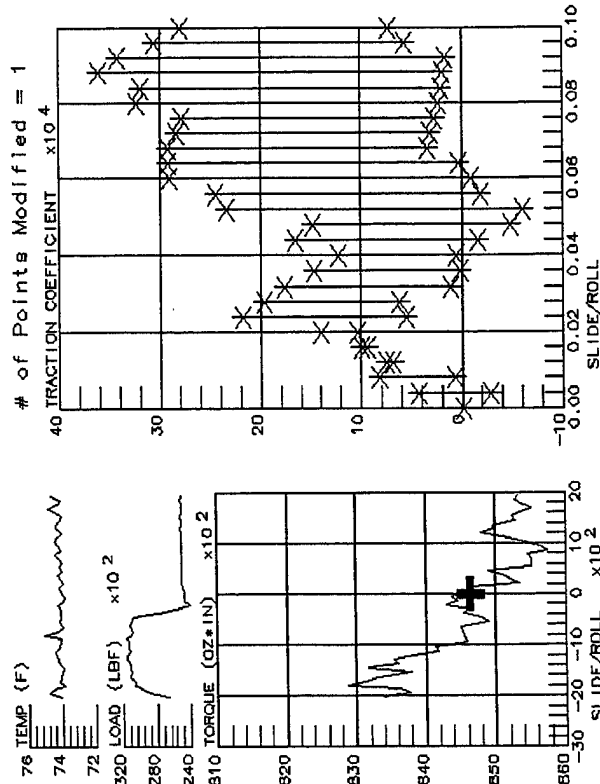
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#7

BB 89-105 Coray 100 new
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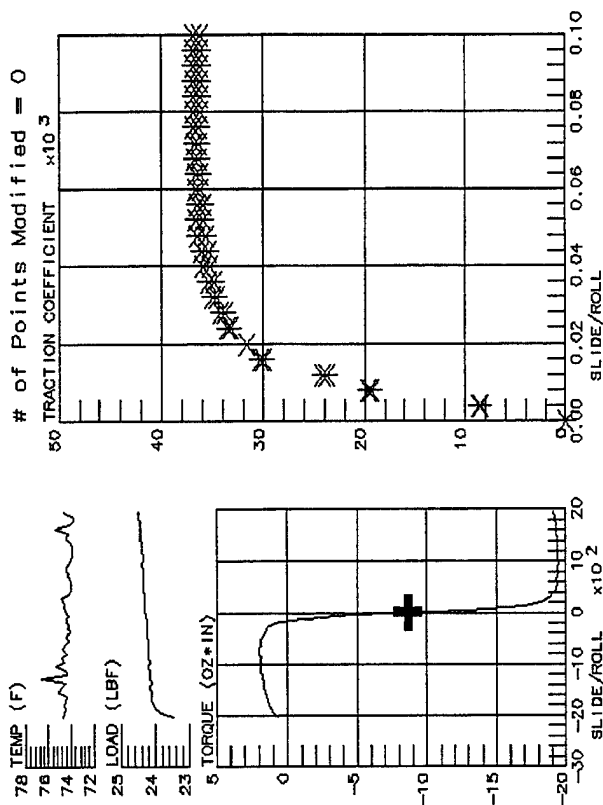
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#10

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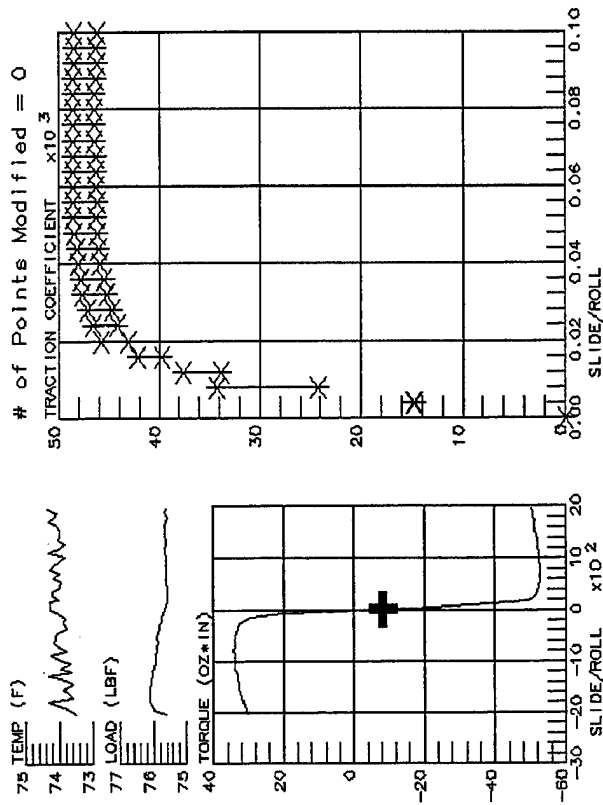
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#12

BB 89-105 Coray 100 new
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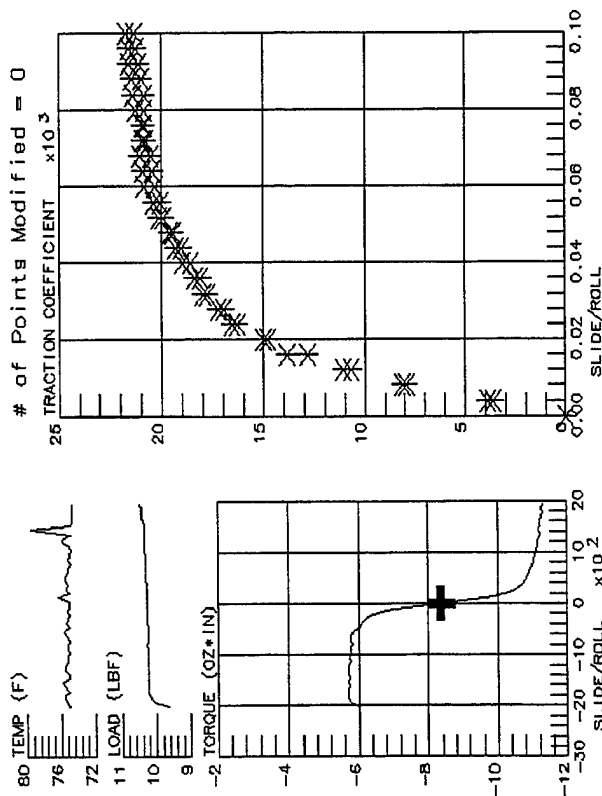
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#9

BB 89-105 Coray 100 new
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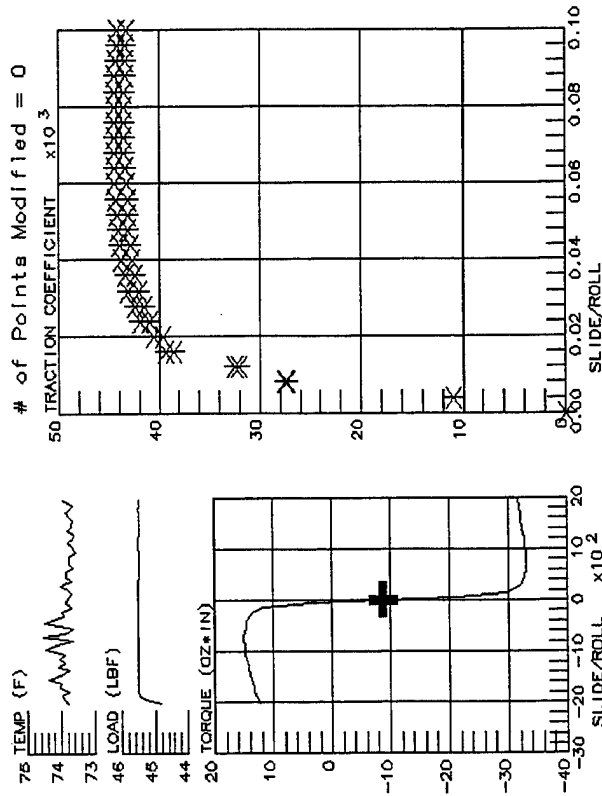
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#11

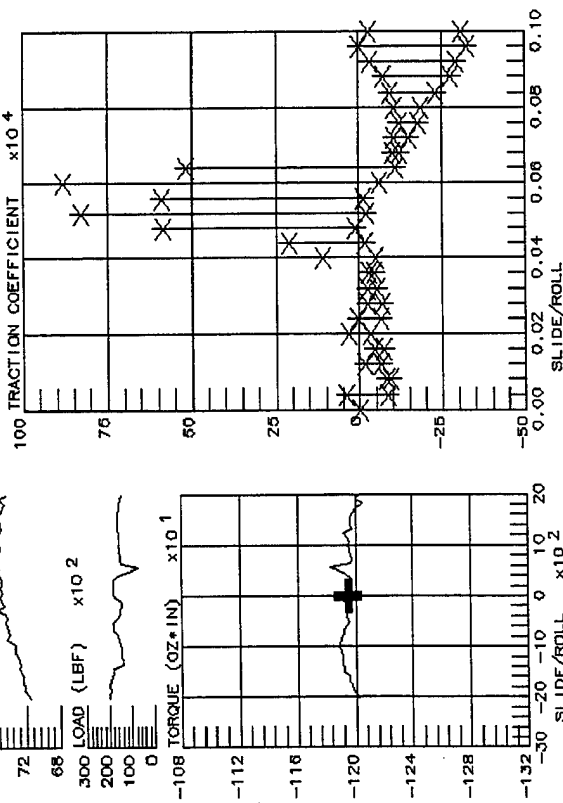
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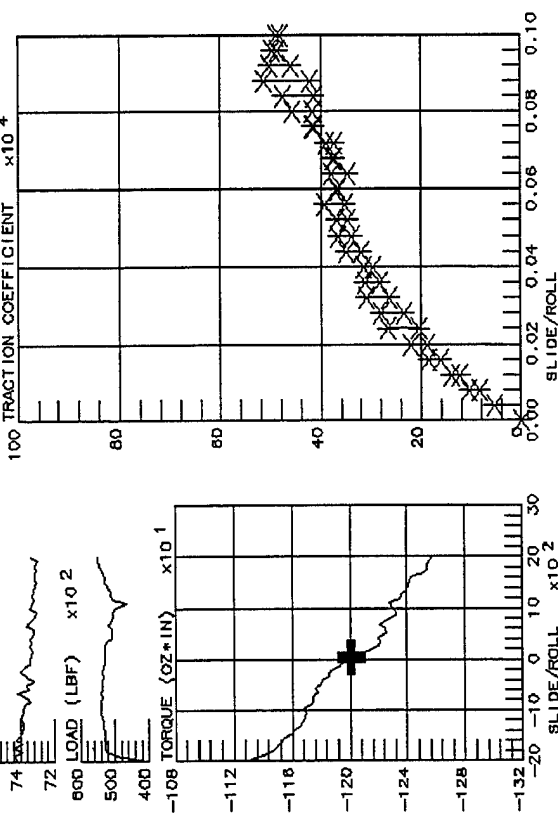
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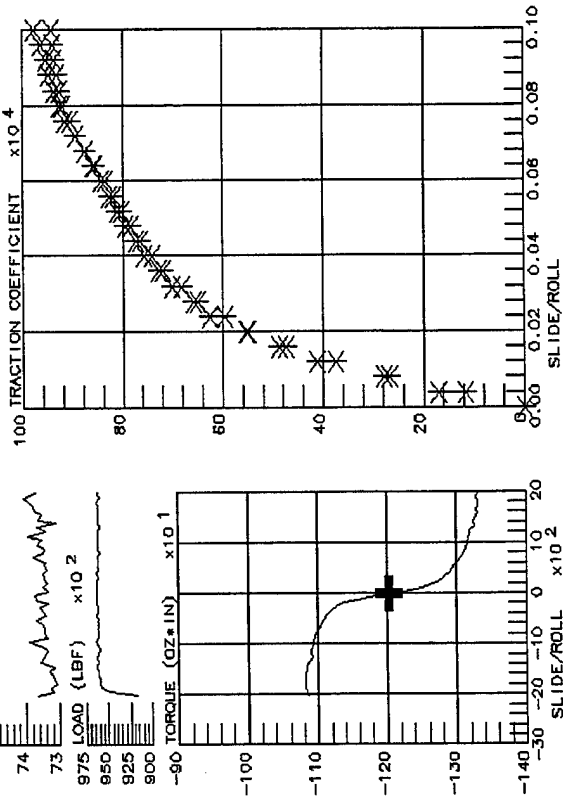
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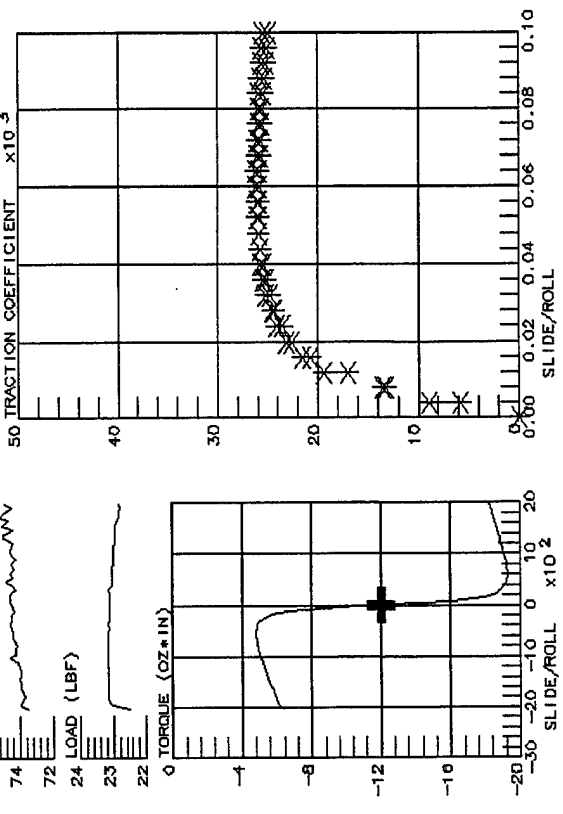
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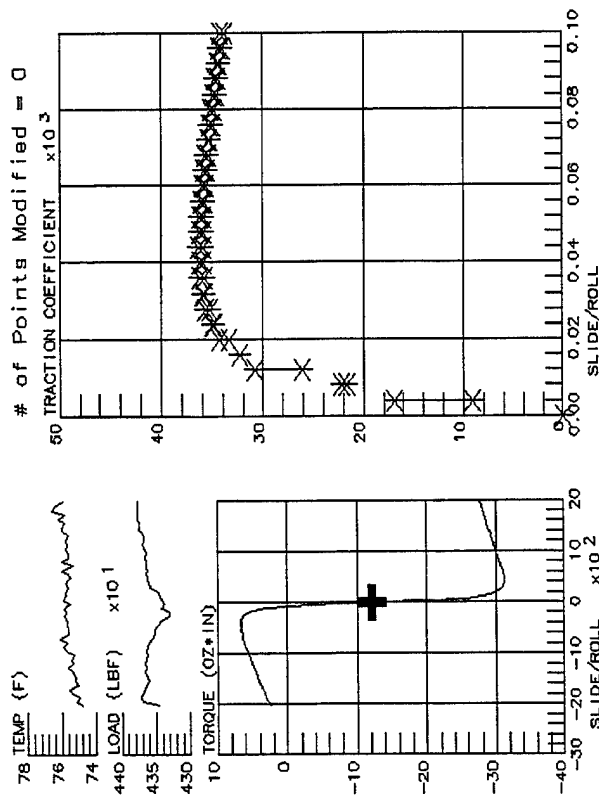


BB 89-105 Coray 100 new #16
75F 23LBF 2546RPM 4 FILE: bb75c

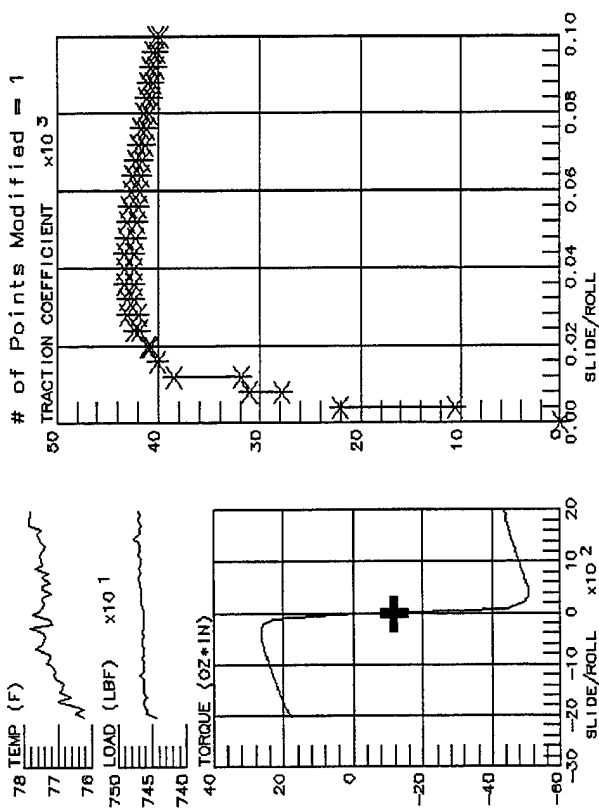
of Points Modified = 1



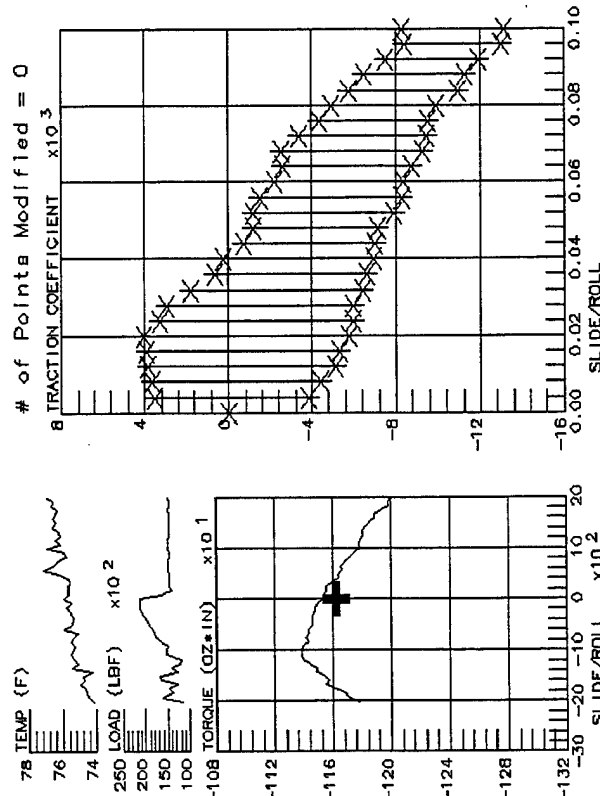
BB 89-105 Coray 100 new #17
75F 44LBF 264RPM 5 FILE: bb75c



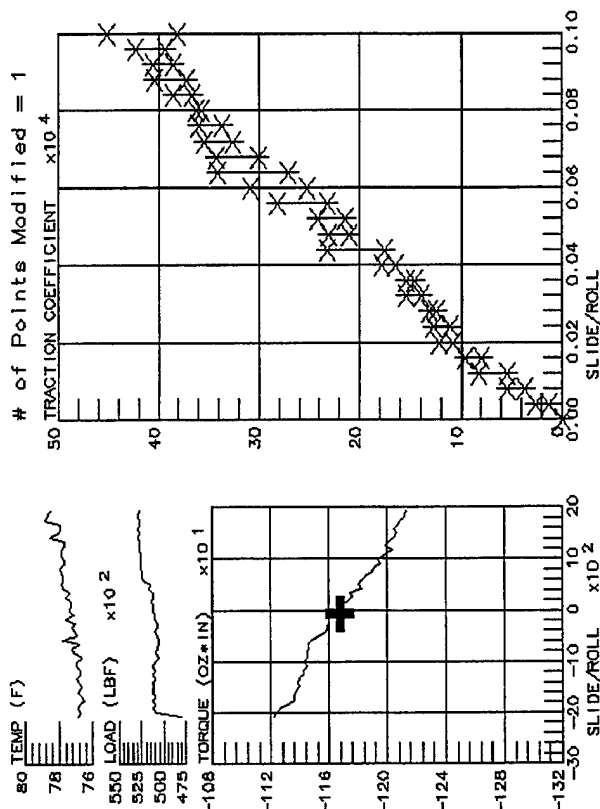
BB 89-105 Coray 100 new #18
75F 75LBF 264RPM 6 FILE: bb75c



BB 89-105 Coray 100 new #19
75F 11LBF 3820RPM 1 FILE: bb75d

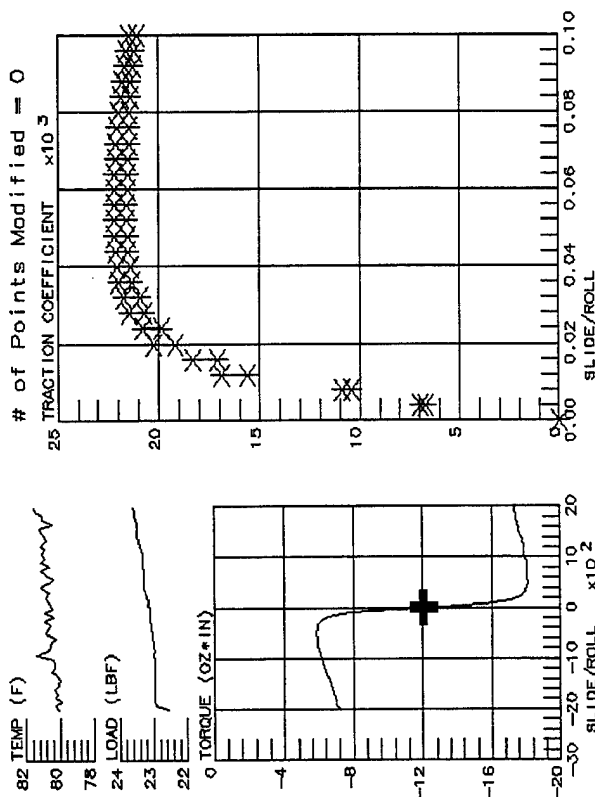


BB 89-105 Coray 100 new #20
75F 5LBF 3820RPM 2 FILE: bb75d



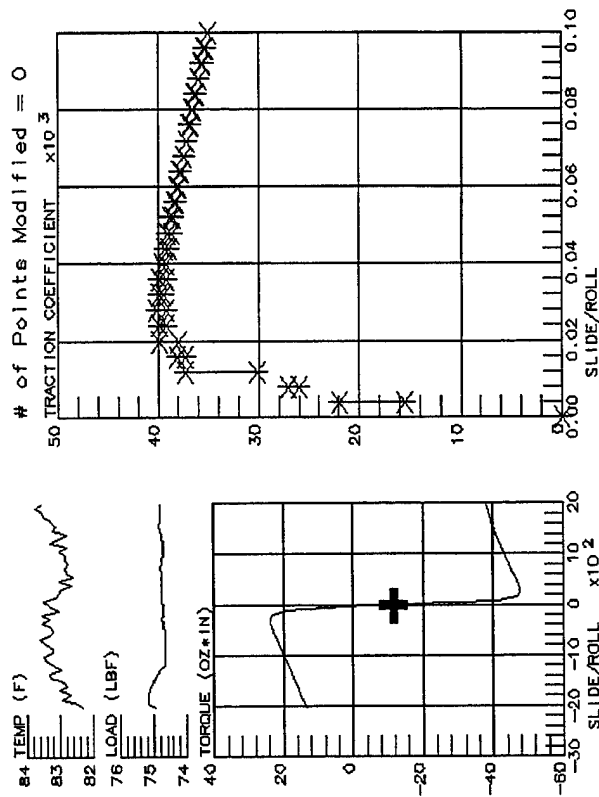
#22

BB 89-105 Coray 100 new
75F 23LBF 3820RPM 4 FILE: bb75d



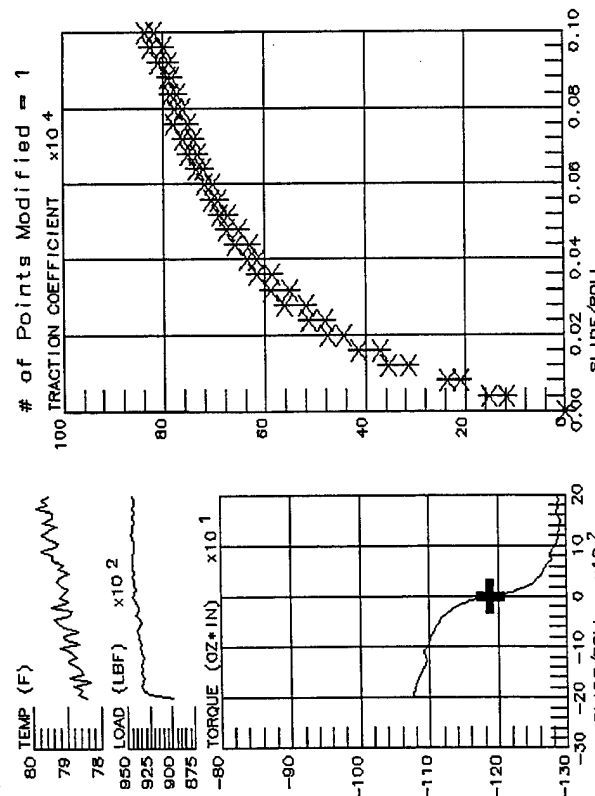
#24

BB 89-105 Coray 100 new
75F 75LBF 3820RPM 6 FILE: bb75d



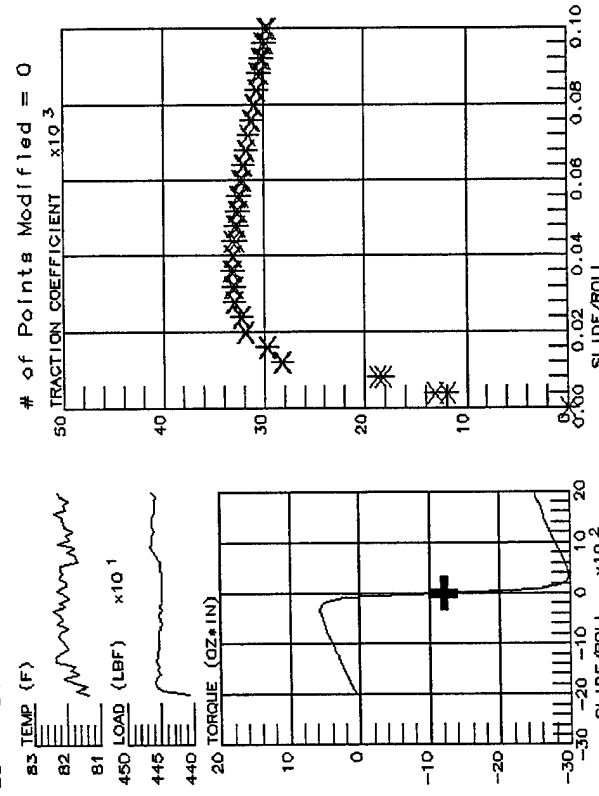
#21

BB 89-105 Coray 100 new
75F 9LBF 3820RPM 3 FILE: bb75d

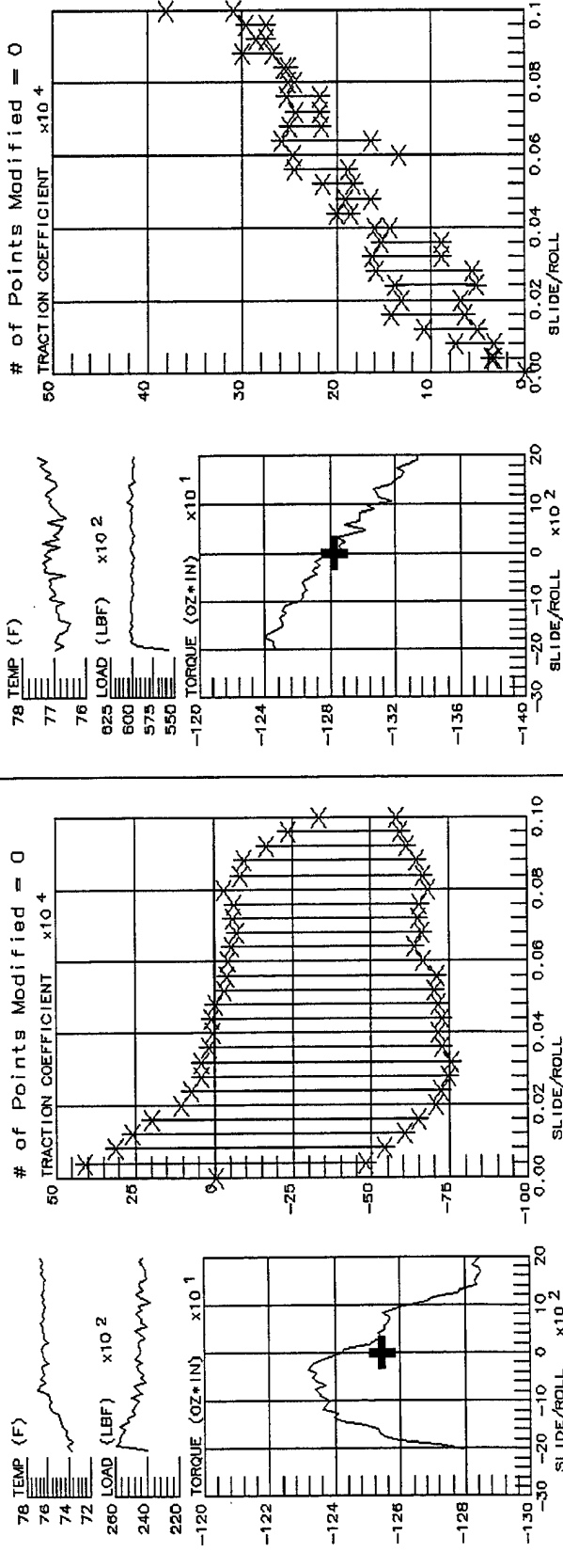


#23

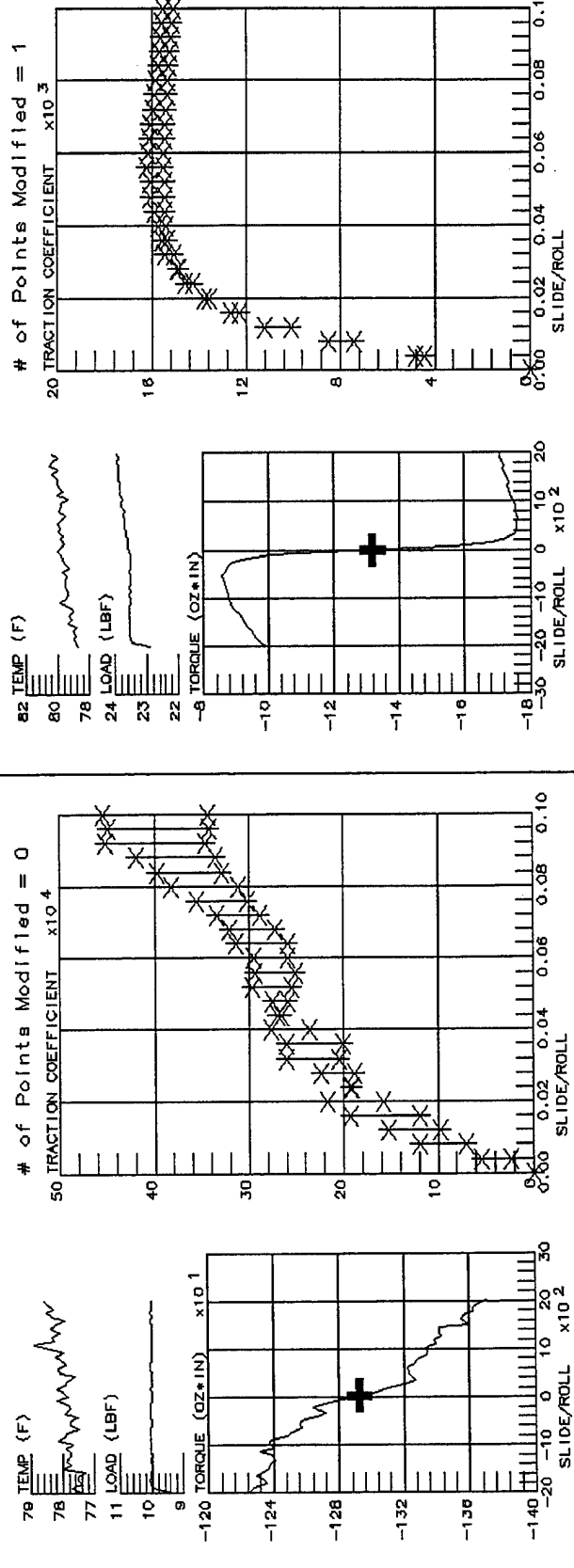
BB 89-105 Coray 100 new
75F 44LBF 3820RPM 5 FILE: bb75d



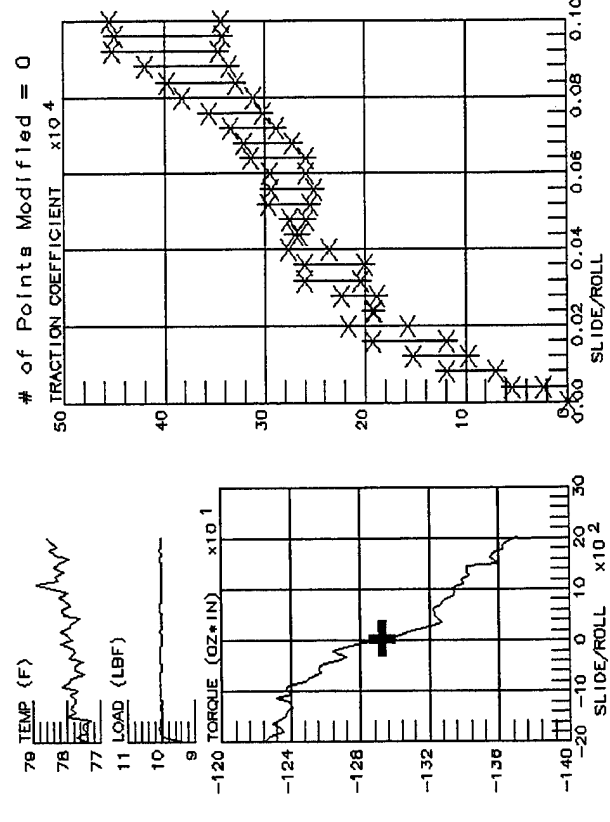
BB 89-105 Coray 100 new #25
75F 11BF 5093RPM 1 FILE: bb75e



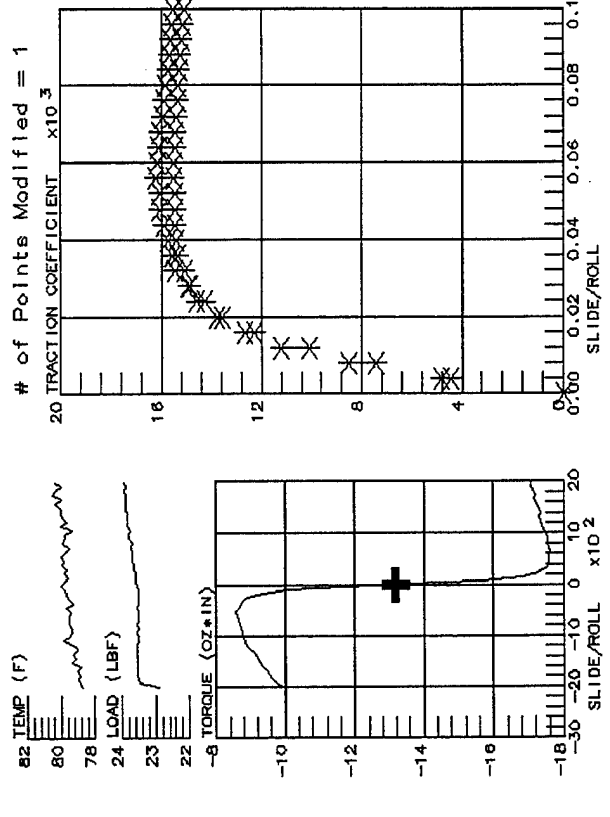
BB 89-105 Coray 100 new #26
75F 6LBF 5093RPM 2 FILE: bb75e



BB 89-105 Coray 100 new #27
75F 9LBF 5093RPM 3 FILE: bb75e

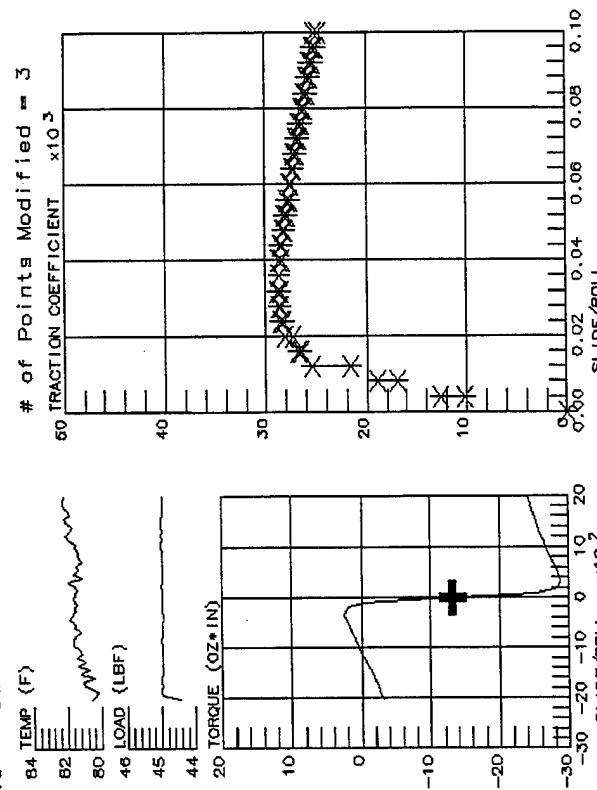
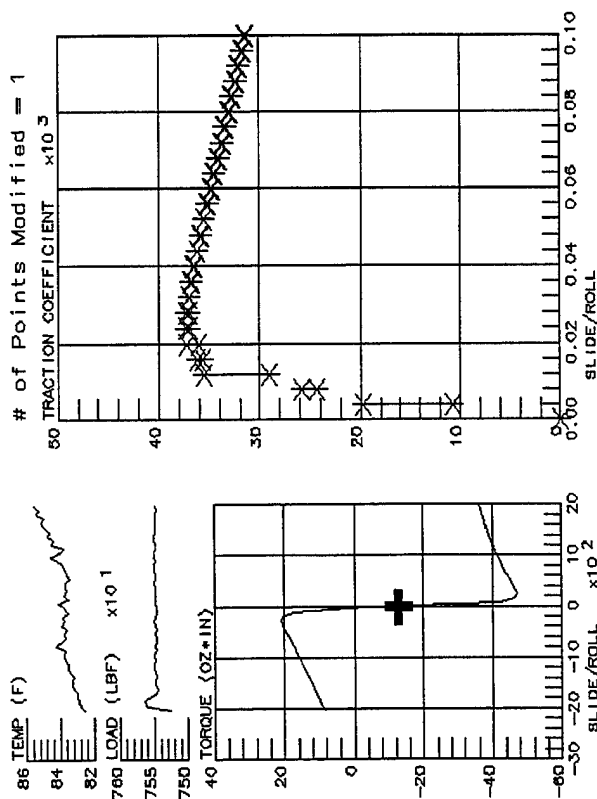


BB 89-105 Coray 100 new #28
75F 23LBF 5093RPM 4 FILE: bb75e



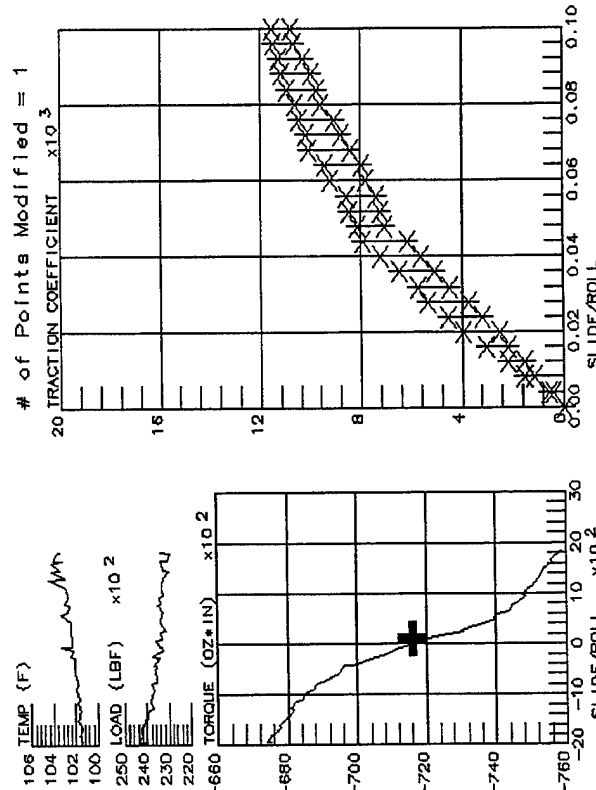
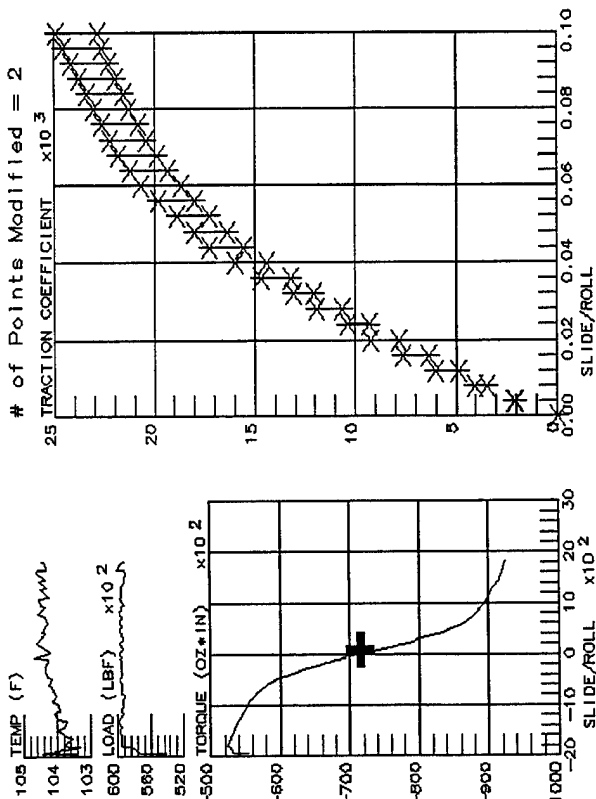
BB 89-105 Coray 100 new
75F 75LBF 5093RPM 6 FILE: bb75e

#29
BB 89-105 Coray 100 new
76F 44LBF 5093RPM 5 FILE: bb75e



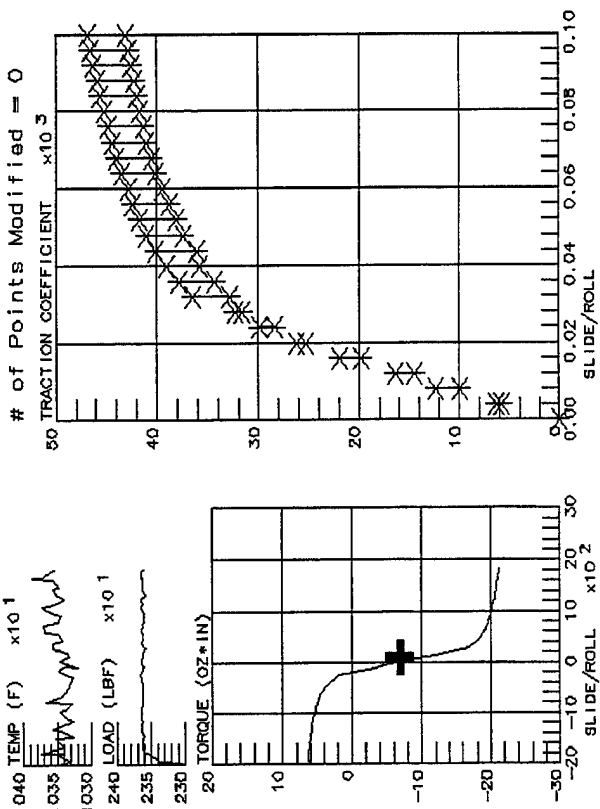
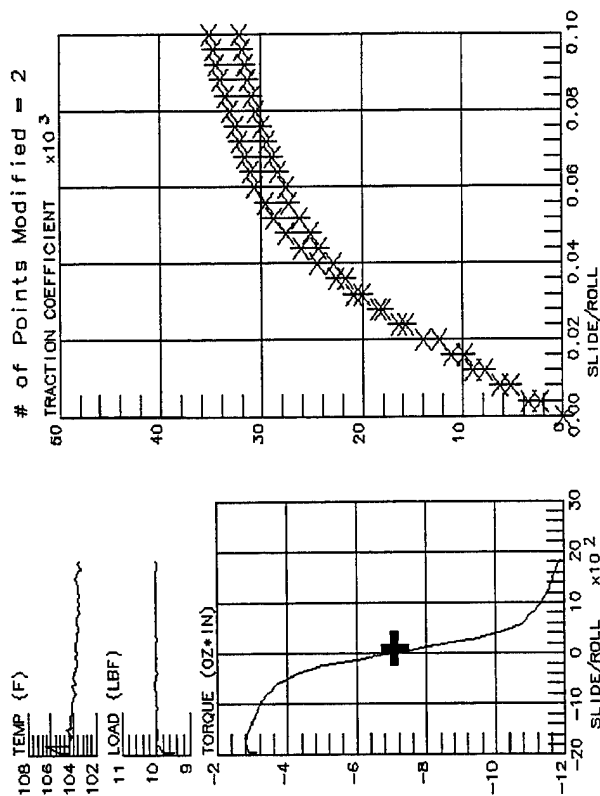
BB 89-105 Coray 100 new
100F 5LBF 283RPM 2 FILE: bb100a

#31
BB 89-105 Coray 100 new
100F 1LBF 283RPM 1 FILE: bb100a



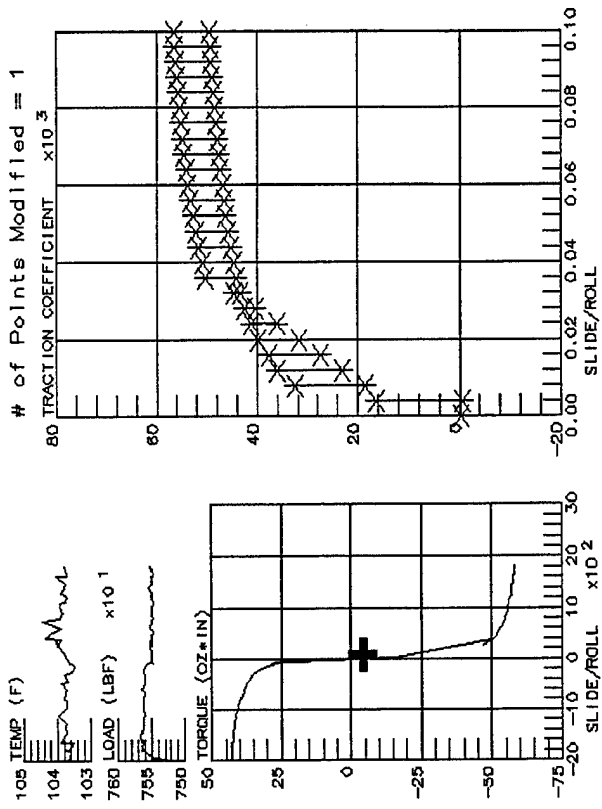
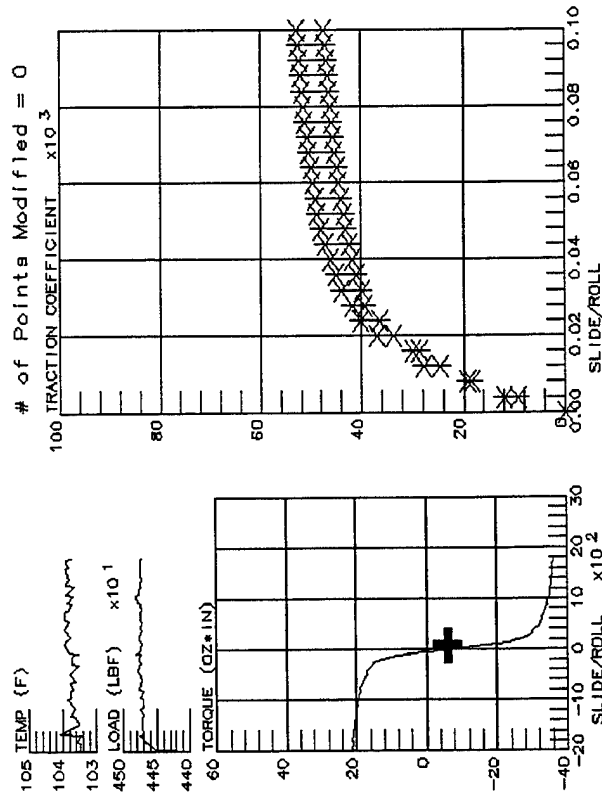
BB 89-105 Coray 100 new
100F 9LBF 283RPM 3 FILE: bb100a

#33
of Points Modified = 2



BB 89-105 Coray 100 new
100F 44LBF 283RPM 5 FILE: bb100a

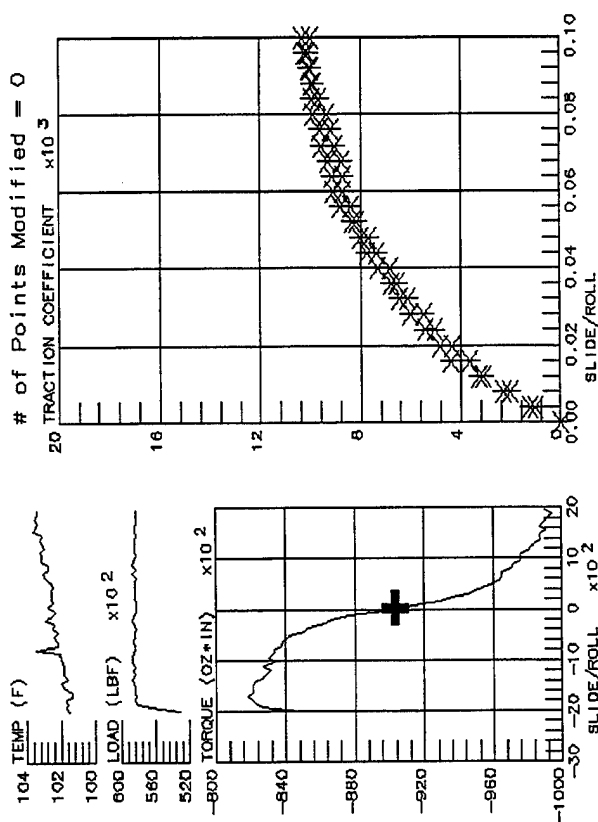
#35
of Points Modified = 0



#38

BB 89-105 Coray 100 new
100F 5LBF 1273RPM 2 FILE: bb100b

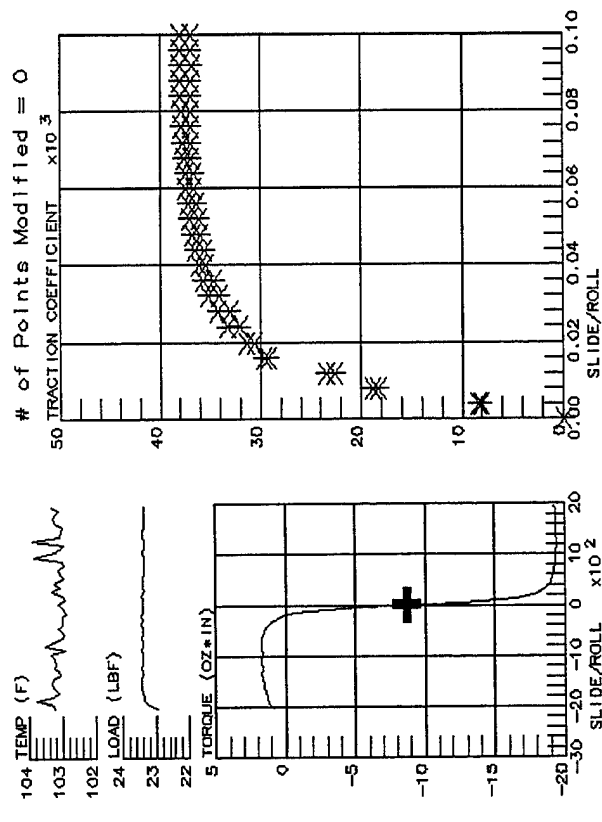
of Points Modified = 0



#40

BB 89-105 Coray 100 new
100F 23LBF 1273RPM 4 FILE: bb100b

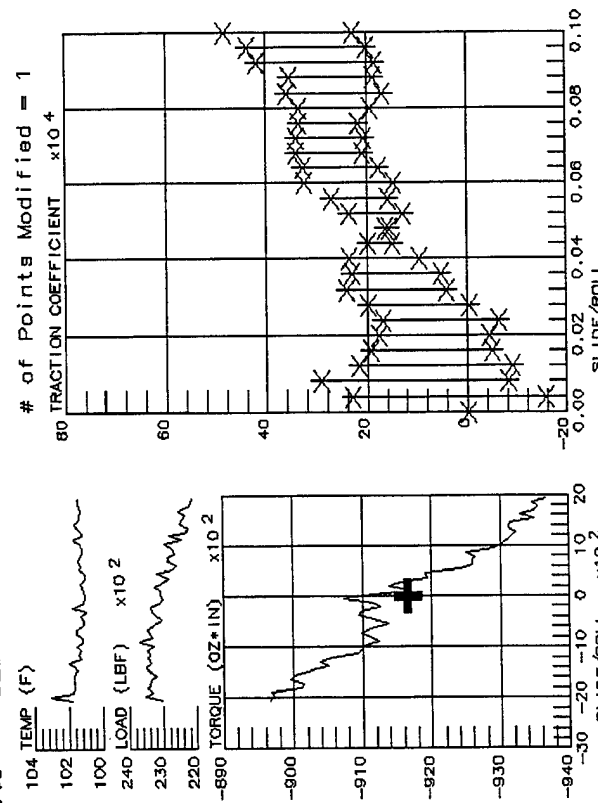
of Points Modified = 0



#37

BB 89-105 Coray 100 new
100F 1LBF 1273RPM 1 FILE: bb100b

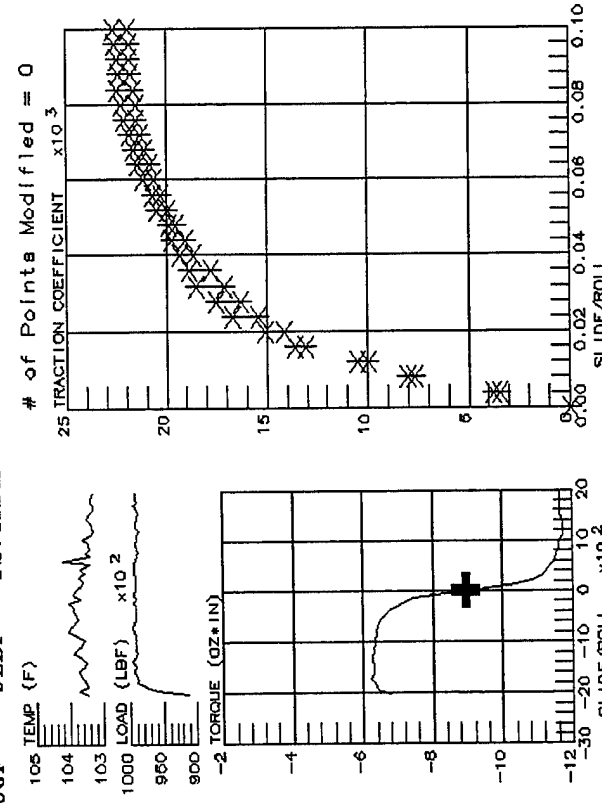
of Points Modified = 1



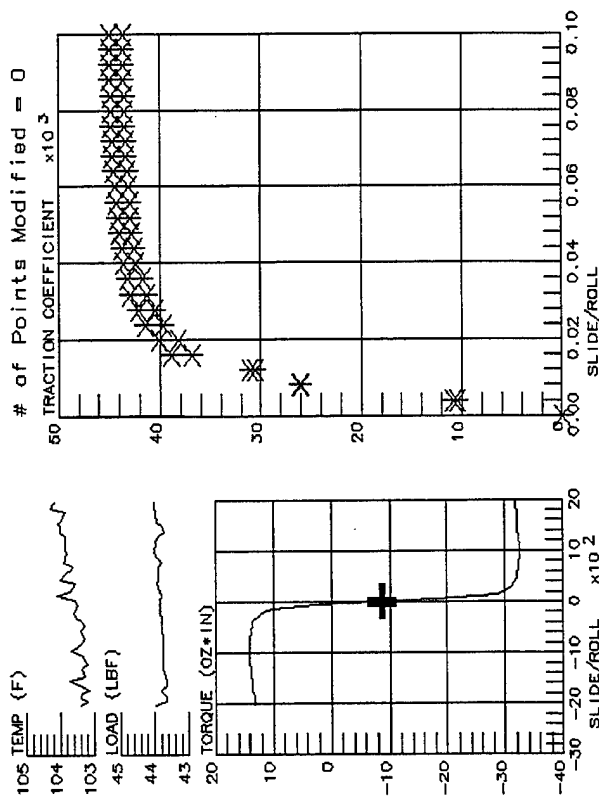
#39

BB 89-105 Coray 100 new
100F 9LBF 1273RPM 3 FILE: bb100b

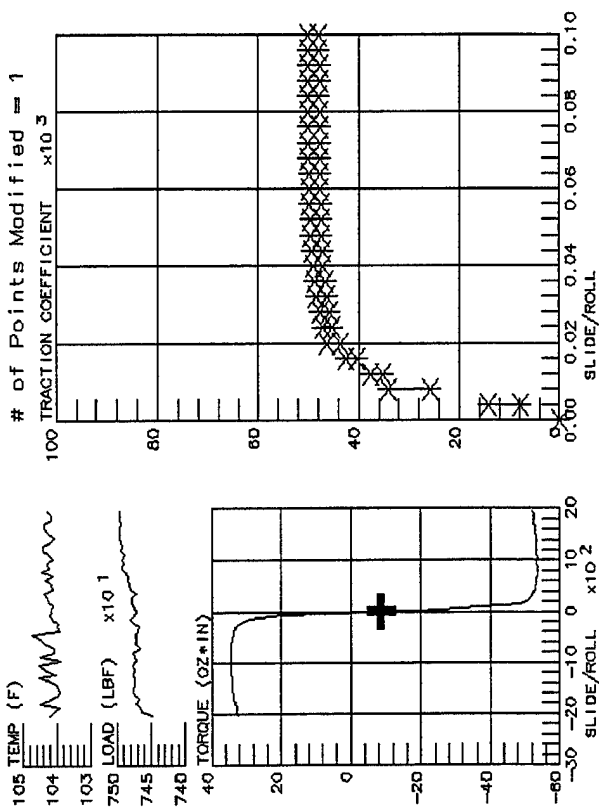
of Points Modified = 0



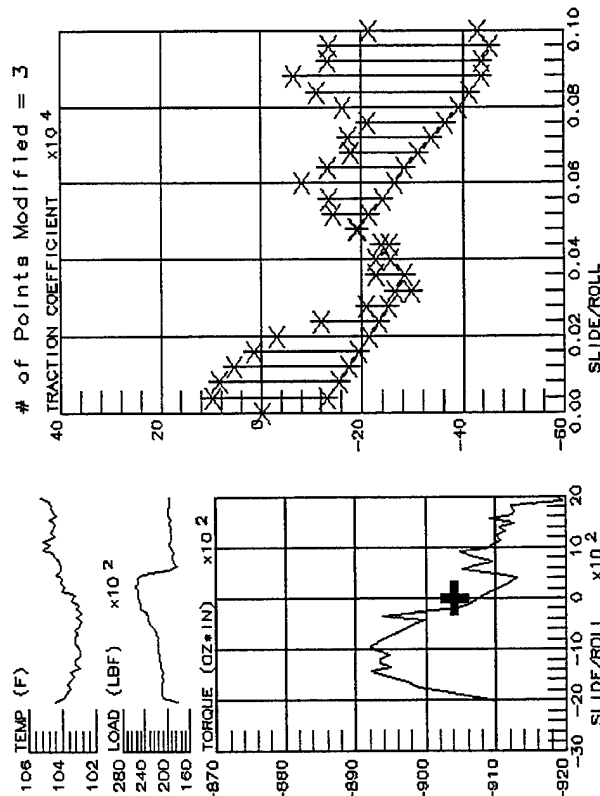
BB 89-105 Coray 100 new #41
100F 44LBF 1273RPM 5 FILE: bb100b



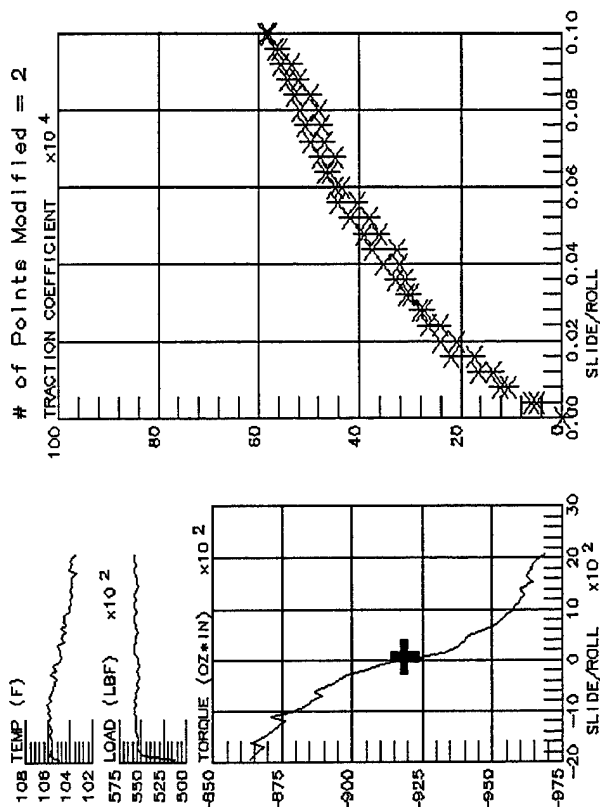
BB 89-105 Coray 100 new #42
100F 75LBF 1273RPM 6 FILE: bb100b

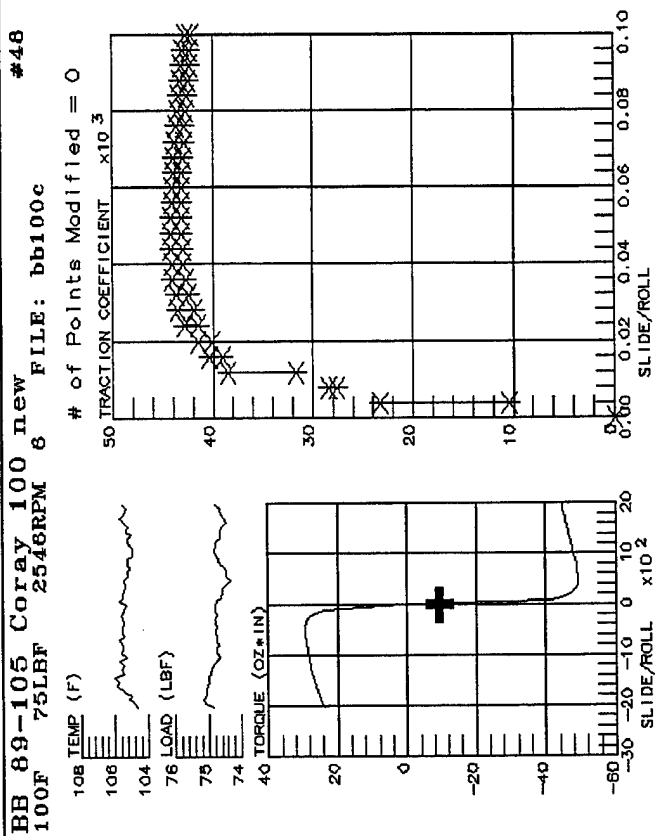
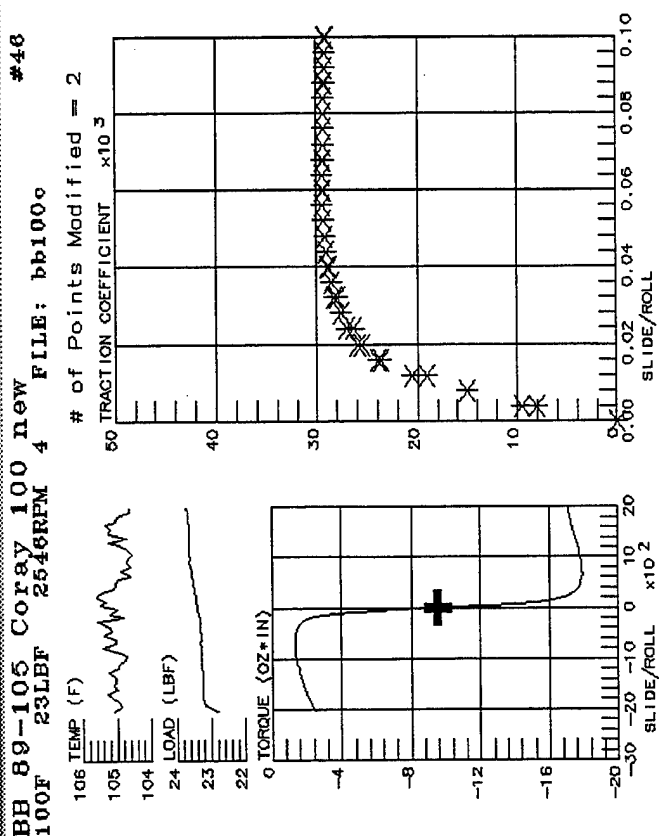
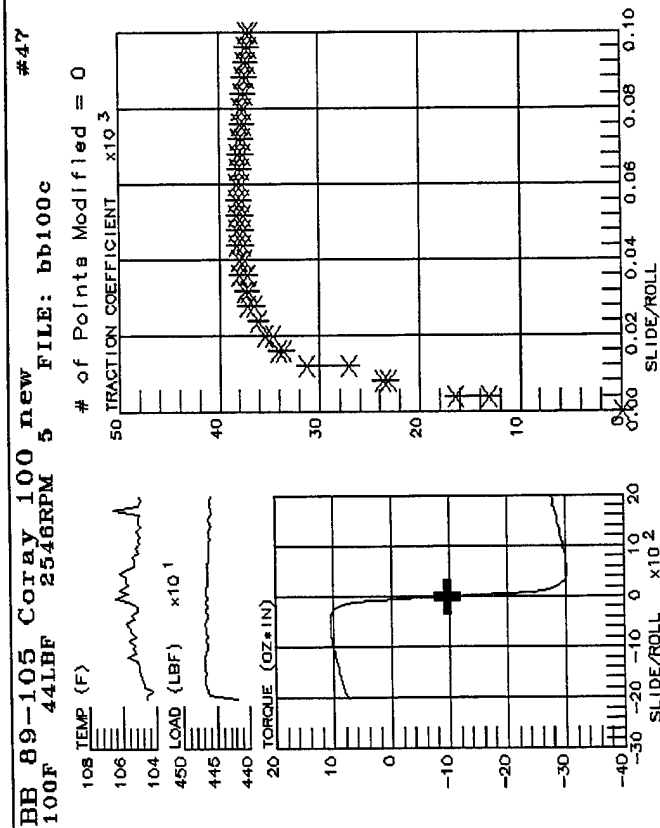
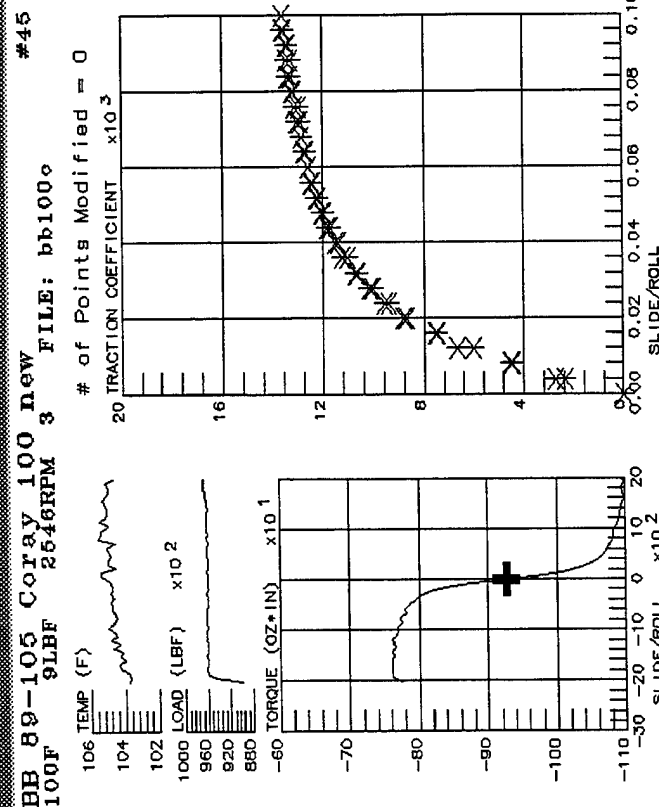


BB 89-105 Coray 100 new #43
100F 1LBF 2546RPM 1 FILE: bb100c

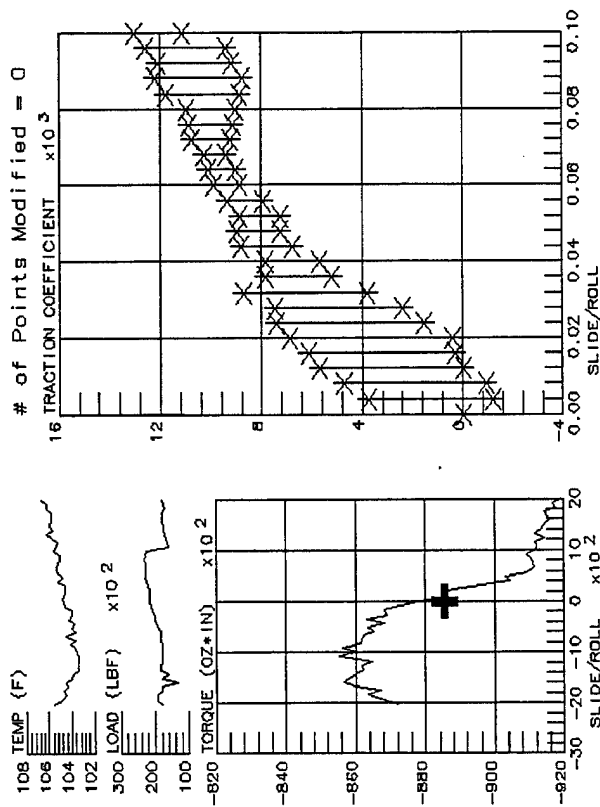


BB 89-105 Coray 100 new #44
100F 5LBF 2546RPM 2 FILE: bb100c

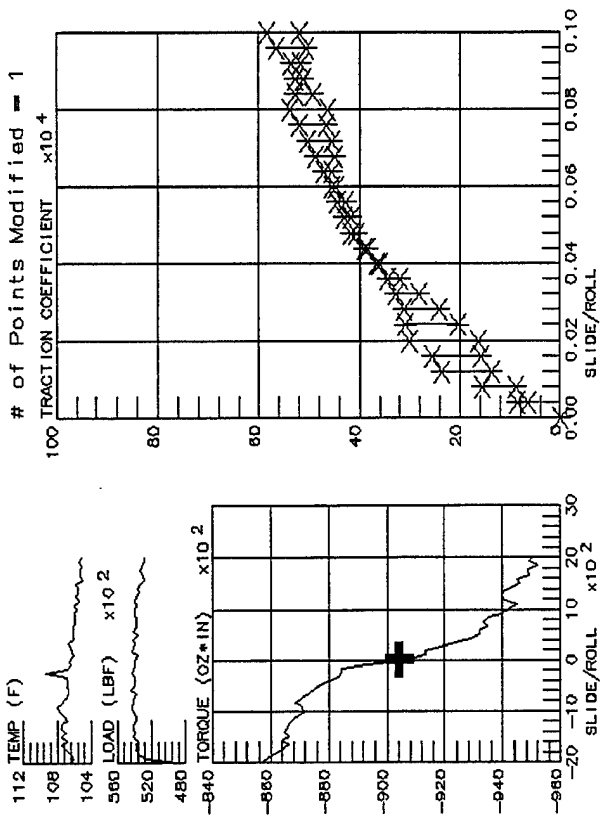




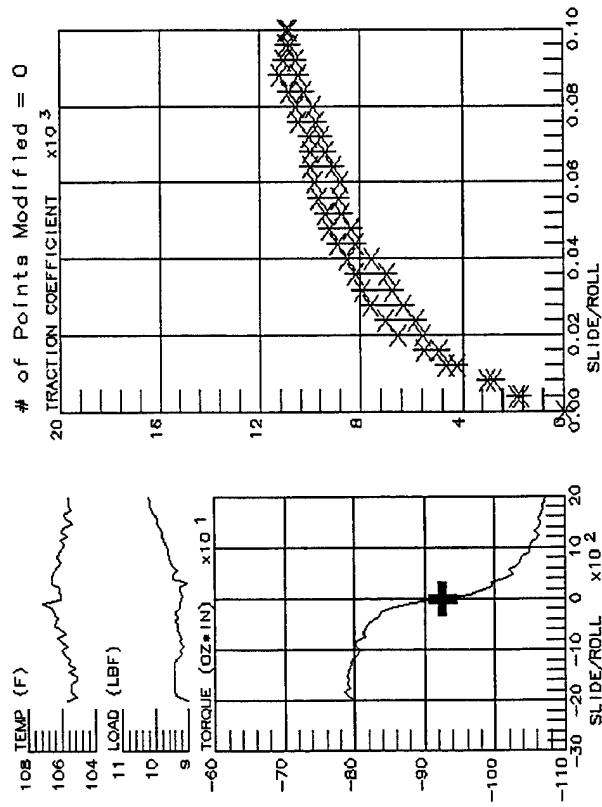
BB 89-105 Coray 100 new #49
100F 1LBF 3820RPM 1 FILE: bb100d



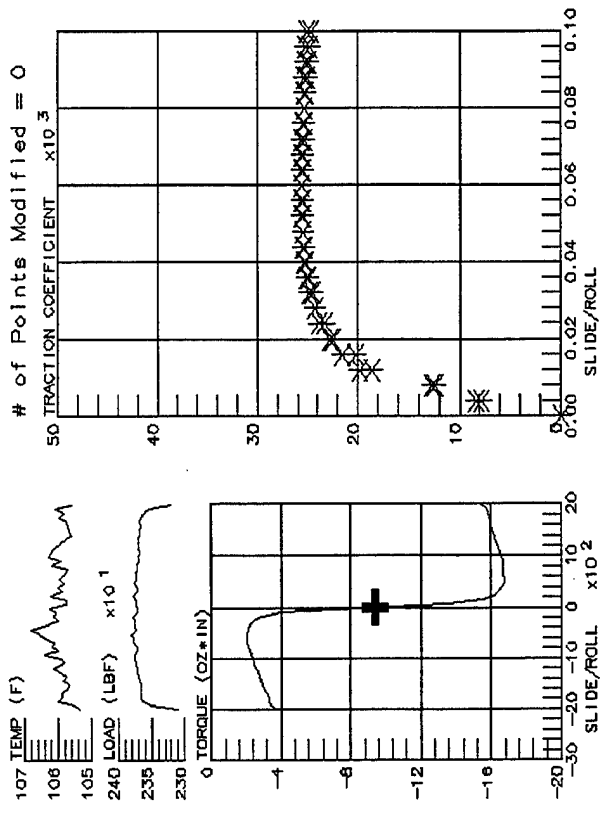
BB 89-105 Coray 100 new #50
100F 5LBF 3820RPM 2 FILE: bb100d



BB 89-105 Coray 100 new #51
100F 9LBF 3820RPM 3 FILE: bb100d

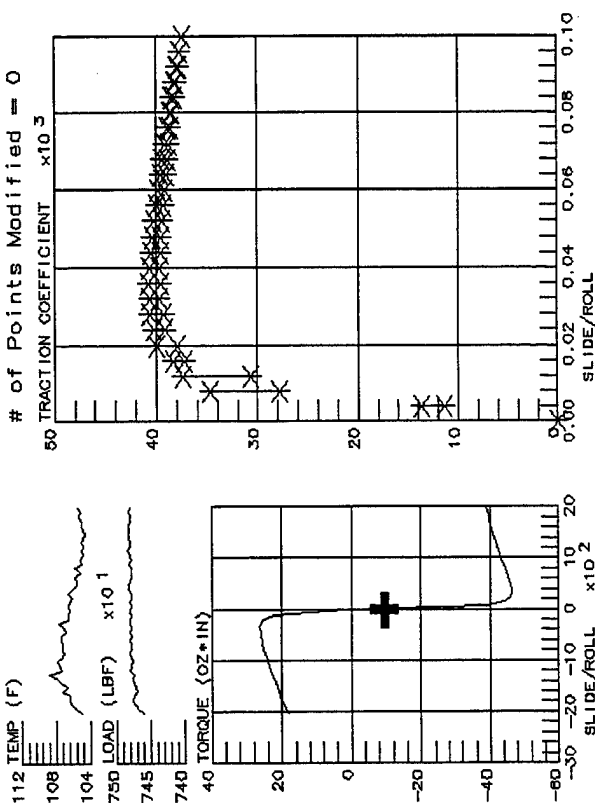
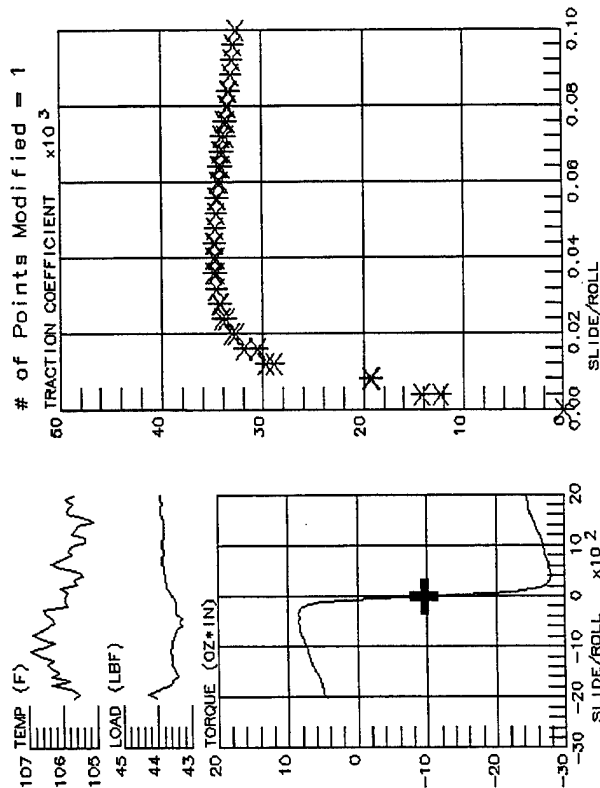


BB 89-105 Coray 100 new #52
100F 23LBF 3820RPM 4 FILE: bb100d



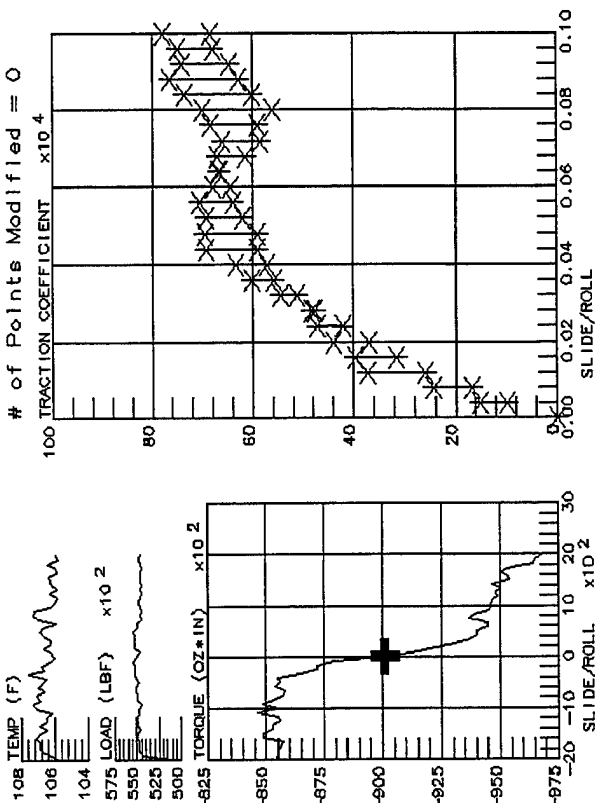
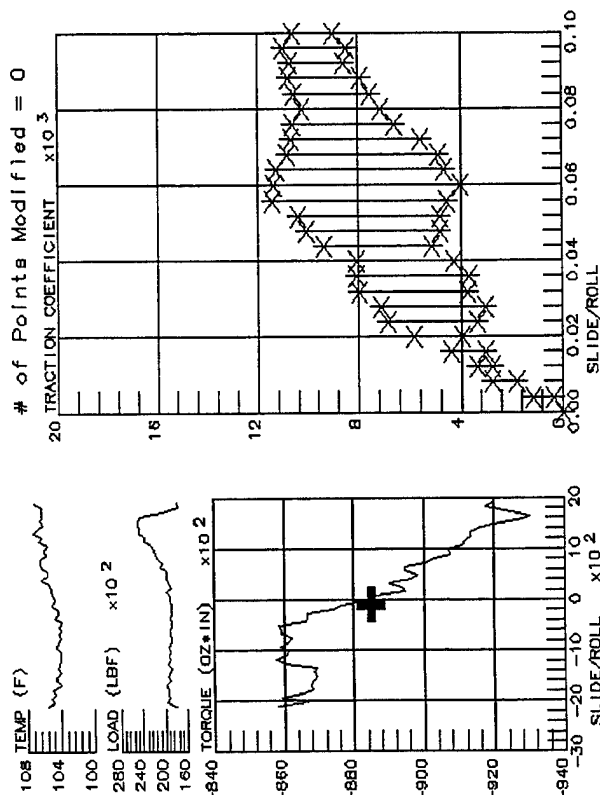
BB 89-105 Coray 100 new
100F 44LBF 3820RPM 5 FILE: bb1004

#53
BB 89-105 Coray 100 new
100F 75LBF 3820RPM 6 FILE: bb100d



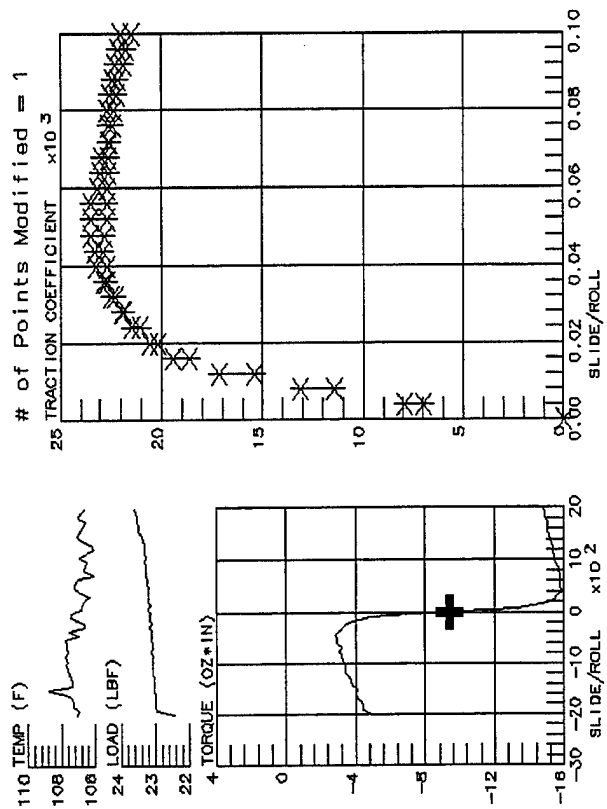
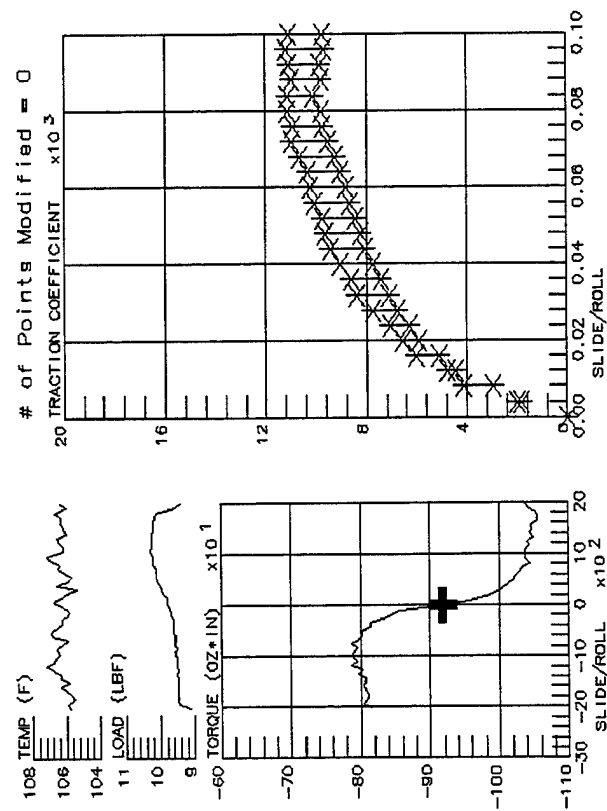
BB 89-105 Coray 100 new
100F 11LBF 5093RPM 1 FILE: bb100e

#56
BB 89-105 Coray 100 new
100F 5LBF 5093RPM 2 FILE: bb100e



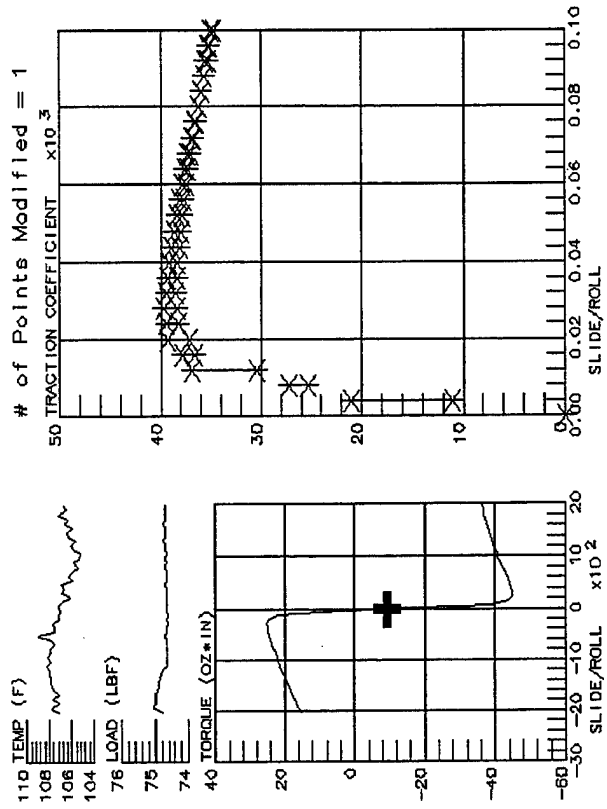
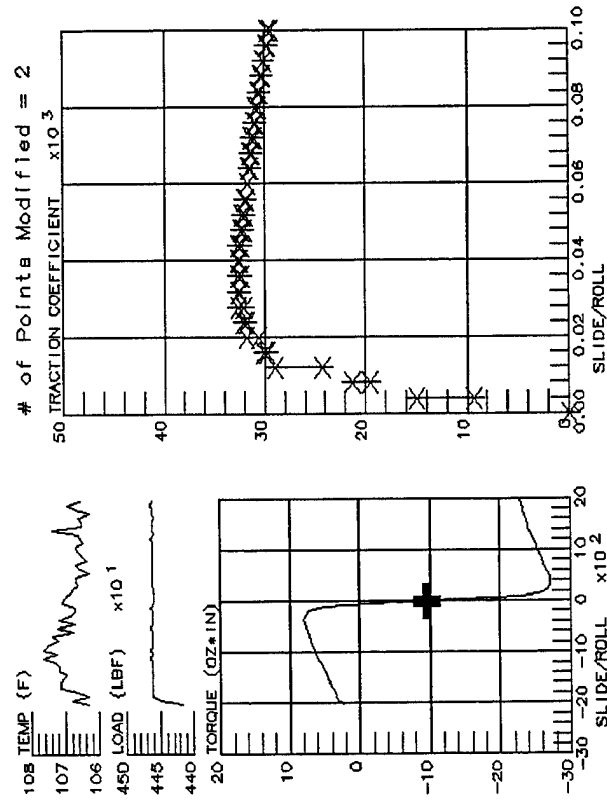
BB 89-105 Coray 100 new
100F 9LBF 5093RPM 3 FILE: bb100e

#57
BB 89-105 Coray 100 new
100F 23LBF 5093RPM 4 FILE: bb100e



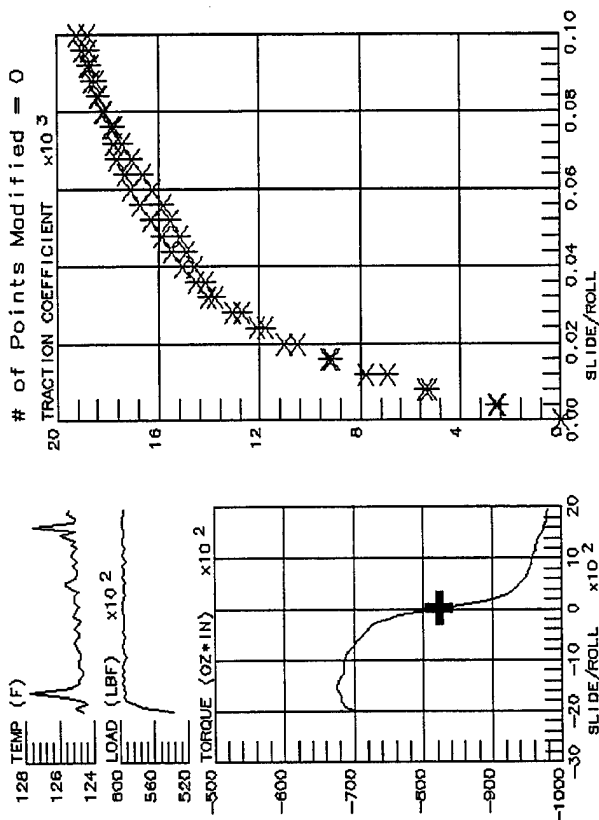
BB 89-105 Coray 100 new
100F 44LBF 5093RPM 5 FILE: bb100e

#59
BB 89-105 Coray 100 new
100F 75LBF 5093RPM 6 FILE: bb100e



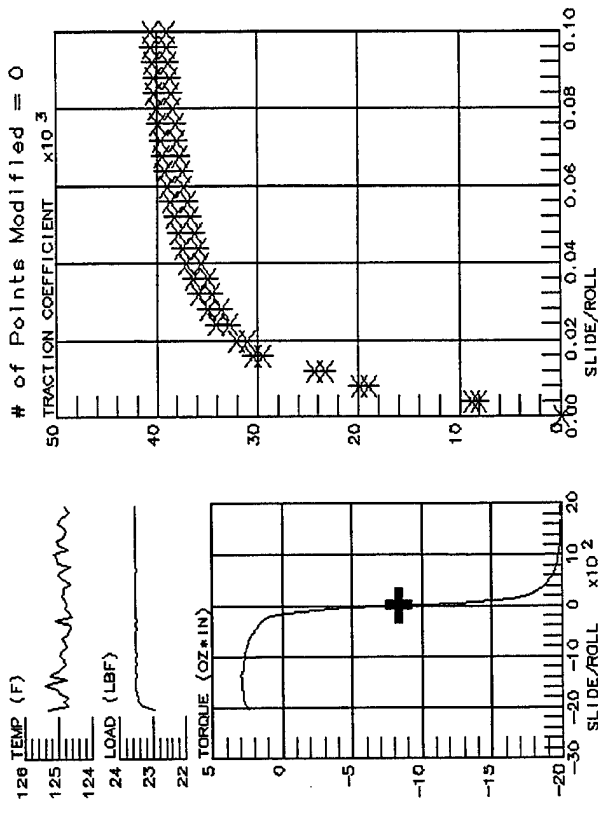
#62

BB 89-105 Coray 100 new
120F 5LBF 1273RPM 2 FILE: bb120b



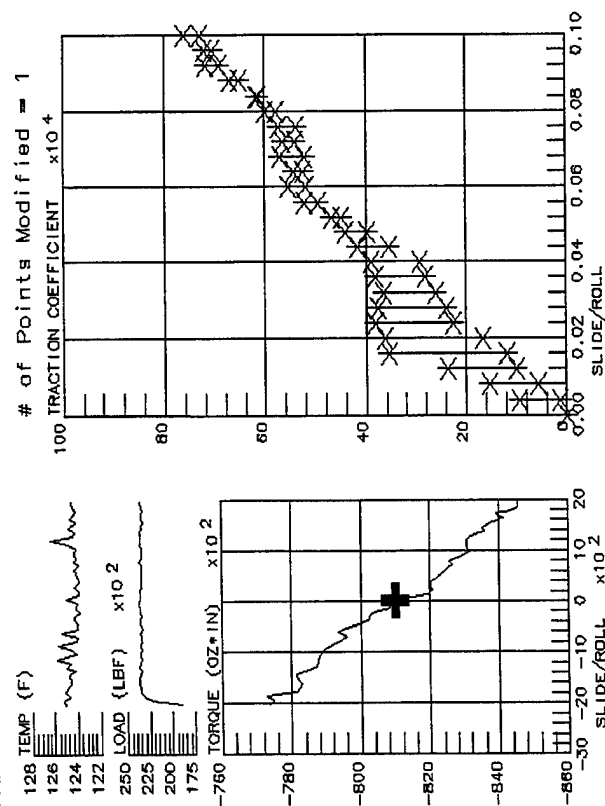
#64

BB 89-105 Coray 100 new
120F 23LBF 1273RPM 4 FILE: bb120b



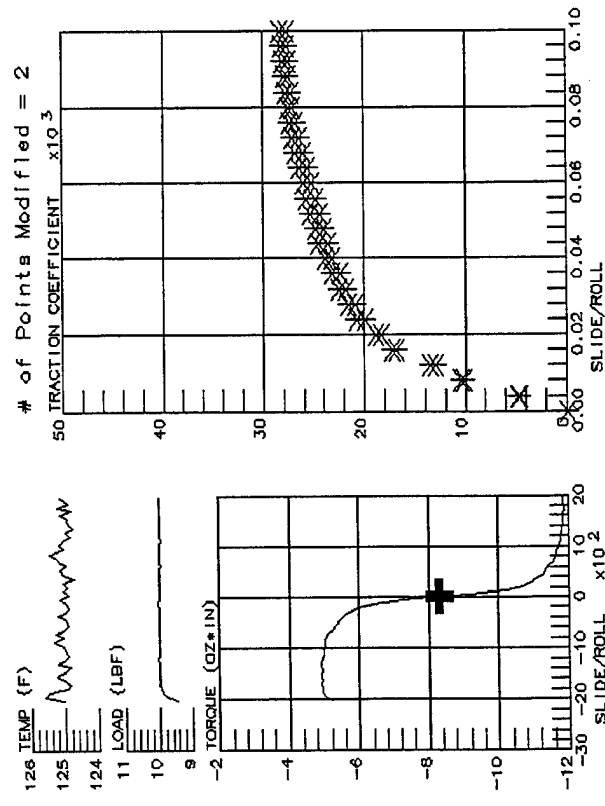
#61

BB 89-105 Coray 100 new
120F 11LBF 1273RPM 1 FILE: bb120b



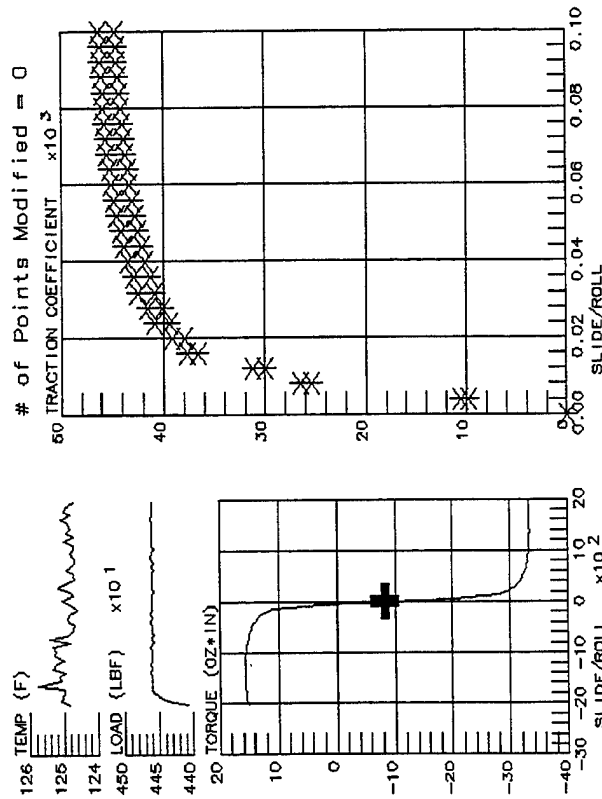
#63

BB 89-105 Coray 100 new
120F 9LBF 1273RPM 3 FILE: bb120b



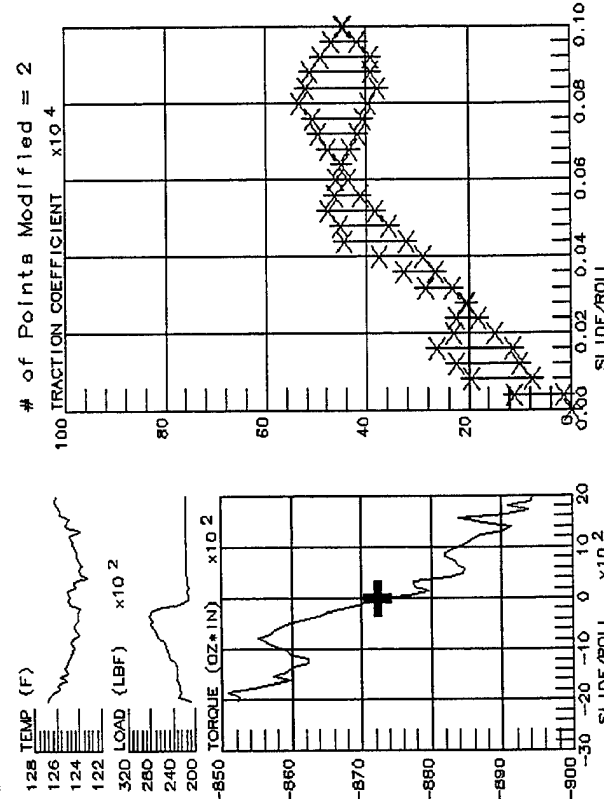
BB 89-105 Coray 100 new
120F 44LBF 1273RPM 5 FILE: bb120b

#65
of Points Modified = 0



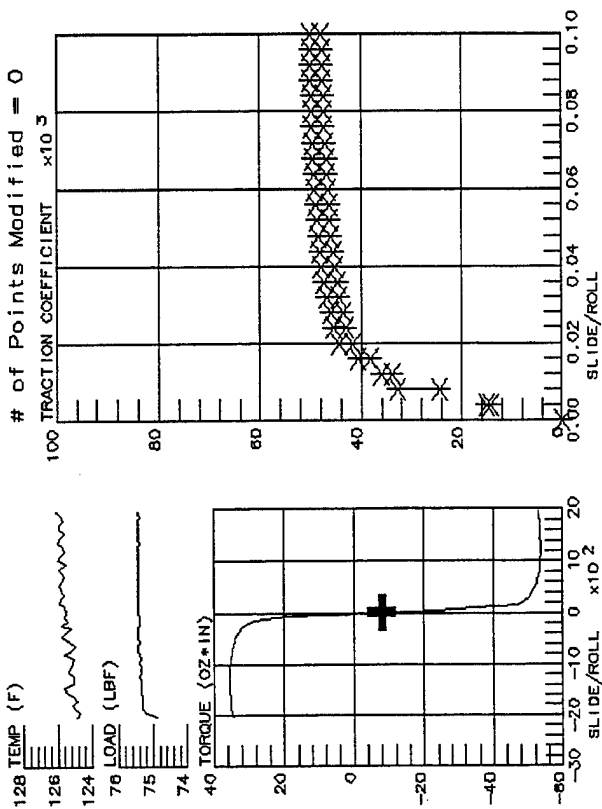
BB 89-105 Coray 100 new
120F 1LBF 2546RPM 1 FILE: bb120c

#67
of Points Modified = 2



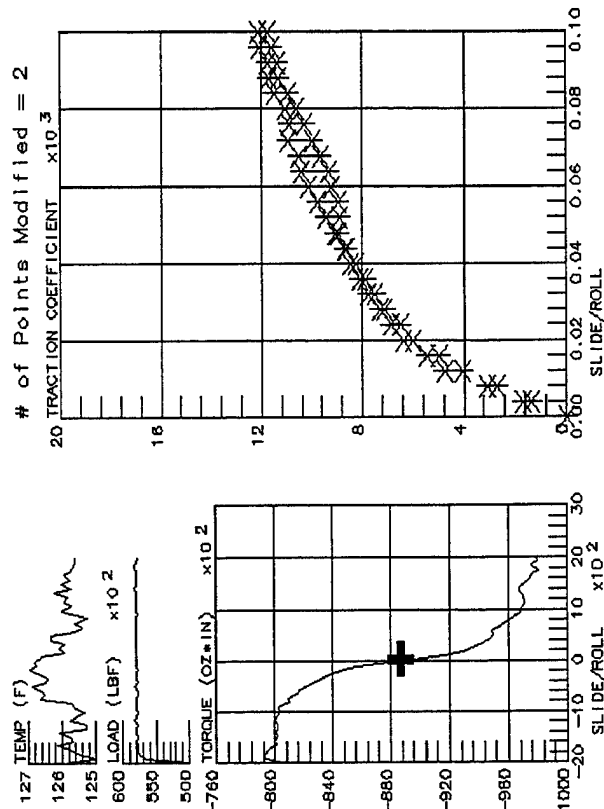
BB 89-105 Coray 100 new
120F 75LBF 1273RPM 6 FILE: bb120b

#66
of Points Modified = 0



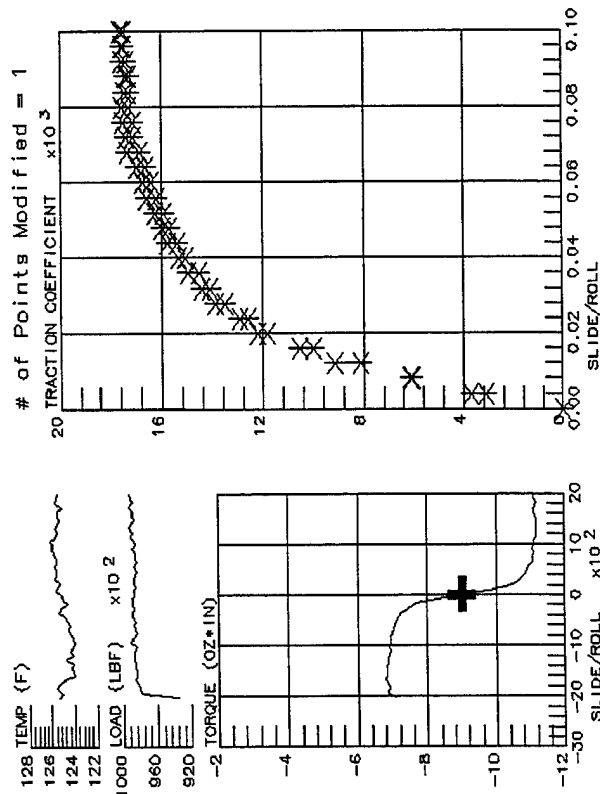
BB 89-105 Coray 100 new
120F 5LBF 2546RPM 2 FILE: bb120c

#68
of Points Modified = 2



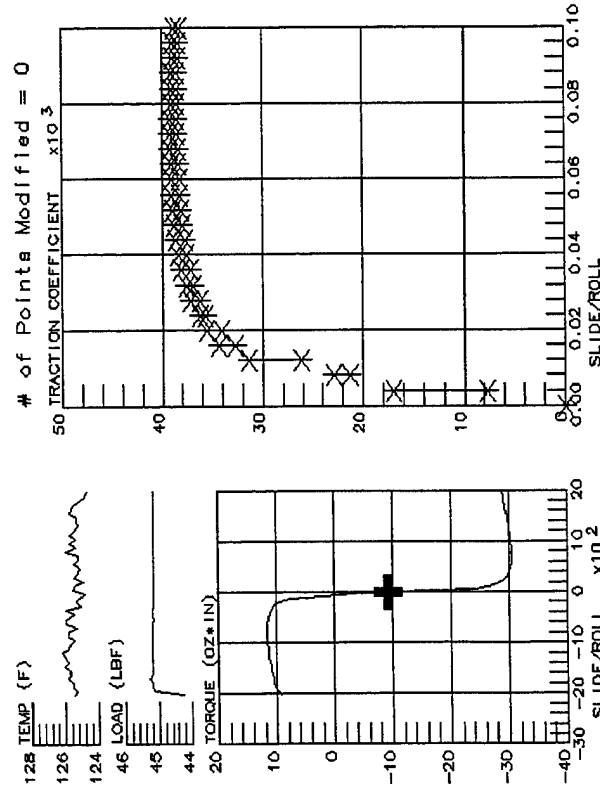
BB 89-105 Coray 100 new
120F 9LBF 2546RPM 3 FILE: bb120c

#69
of Points Modified = 1



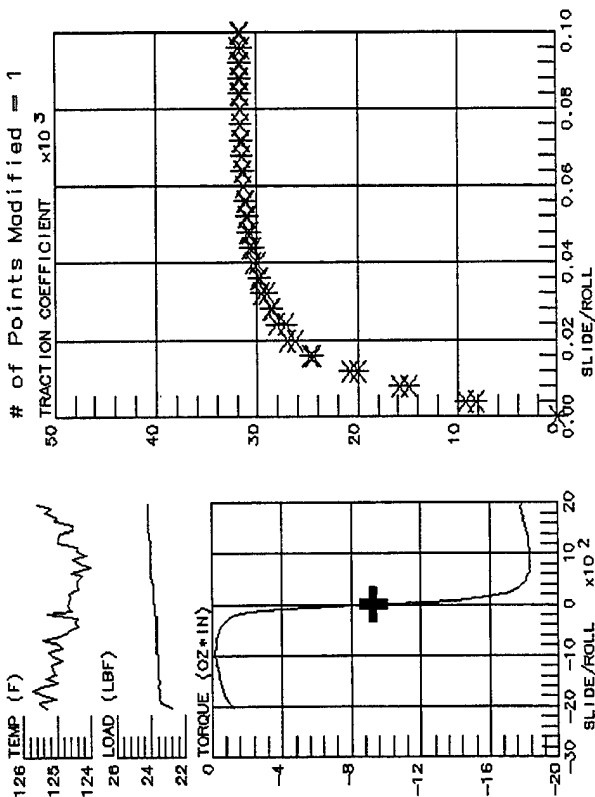
BB 89-105 Coray 100 new
120F 44LBF 2546RPM 5 FILE: bb120c

#71
of Points Modified = 0



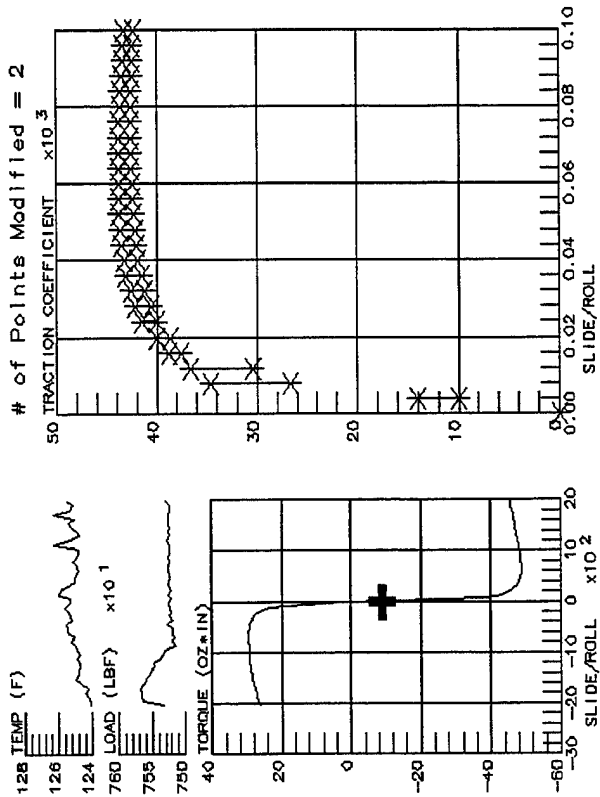
BB 89-105 Coray 100 new
120F 23LBF 2546RPM 4 FILE: bb120c

#70
of Points Modified = 1



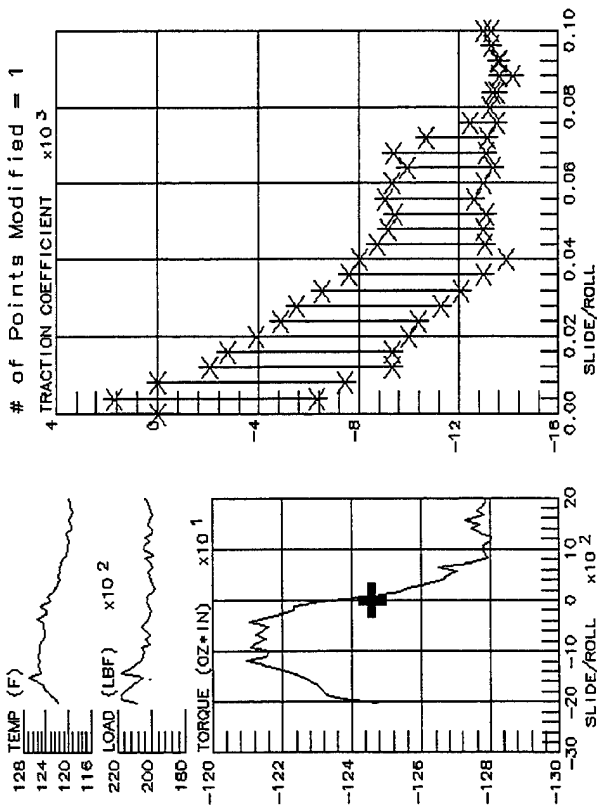
BB 89-105 Coray 100 new
120F 75LBF 2546RPM 6 FILE: bb120c

#72
of Points Modified = 2



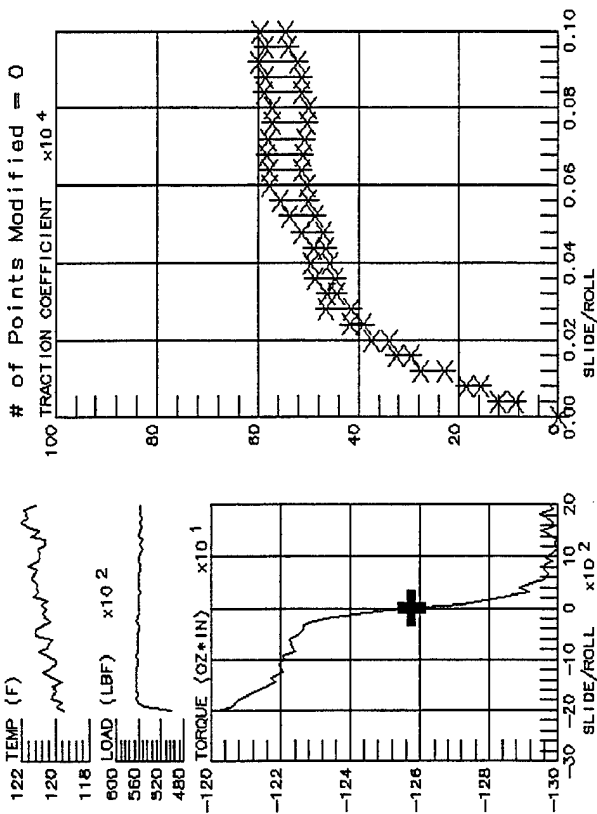
BB 89-105 Coray 100 new
120F 1LBF 3820RPM 1 FILE: bb120d

#73
of Points Modified = 1



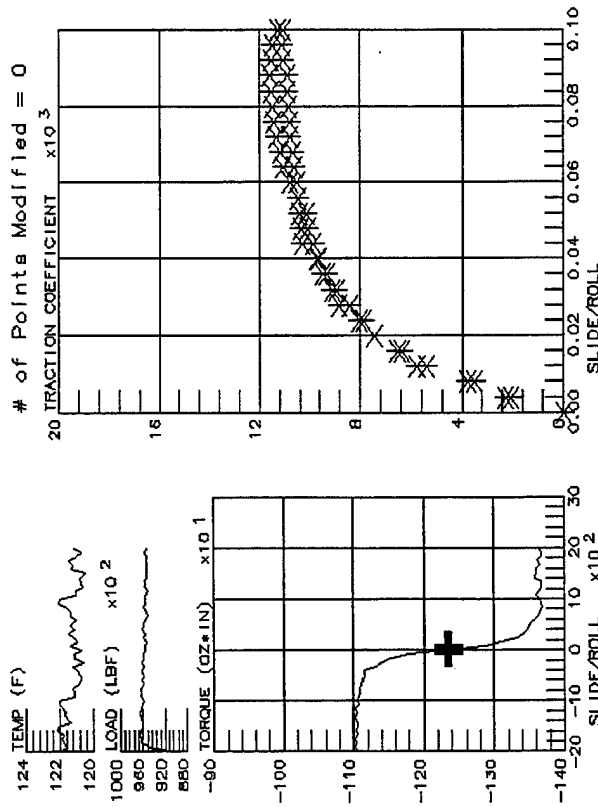
BB 89-105 Coray 100 new
120F 5LBF 3820RPM 2 FILE: bb120d

#74
of Points Modified = 0



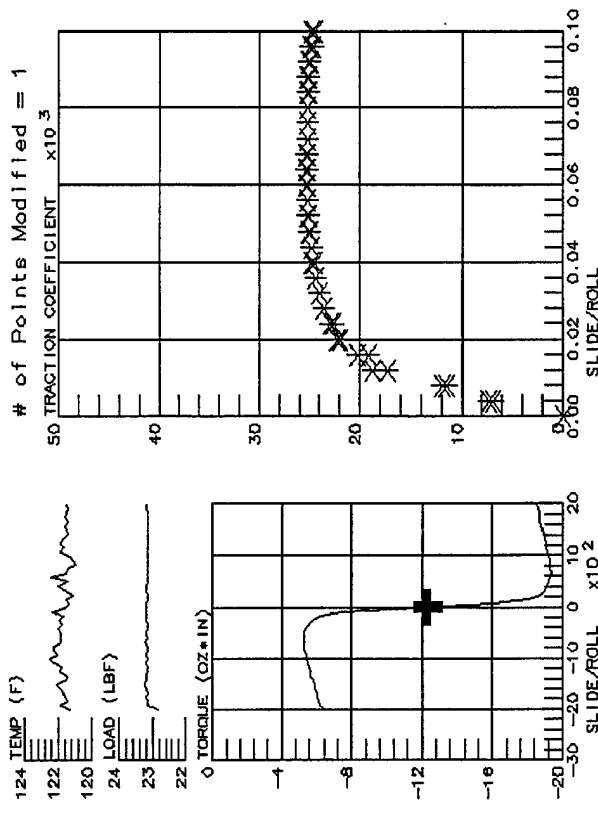
BB 89-105 Coray 100 new
120F 9LBF 3820RPM 3 FILE: bb120d

#75
of Points Modified = 0



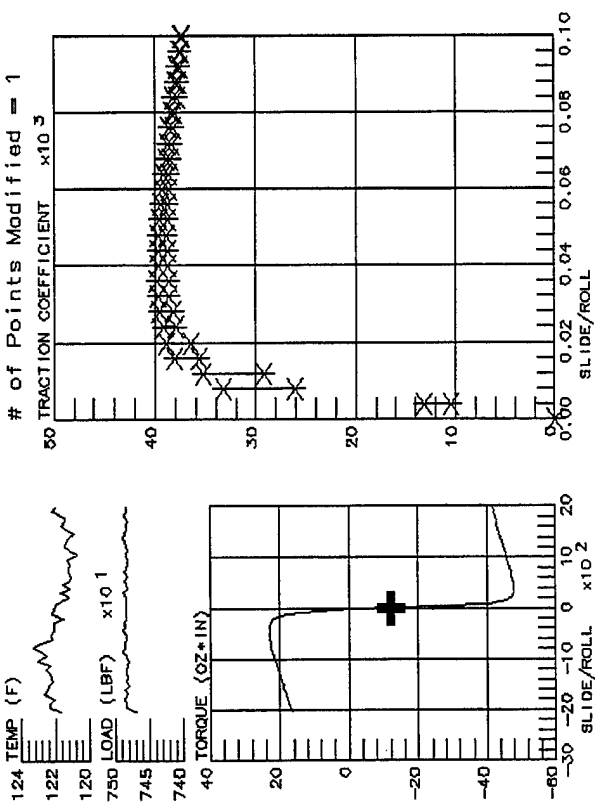
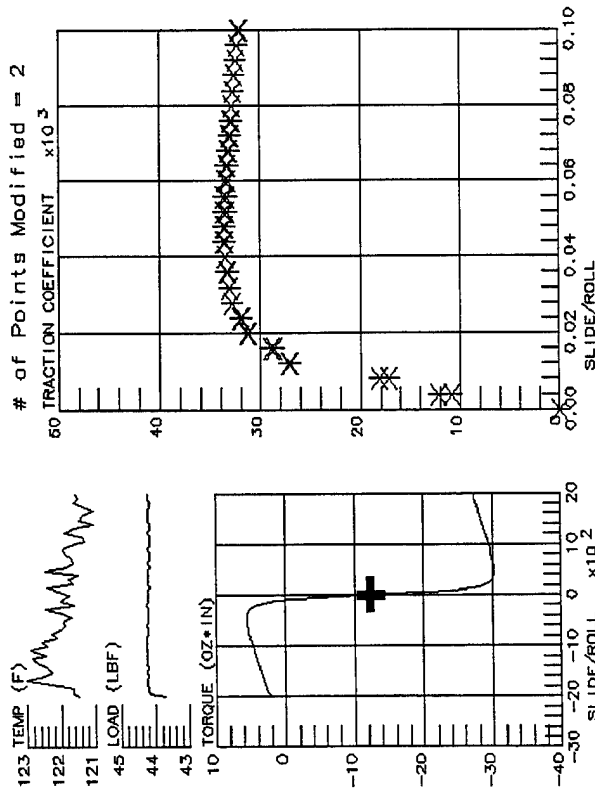
BB 89-105 Coray 100 new
120F 23LBF 3820RPM 4 FILE: bb120d

#76
of Points Modified = 1



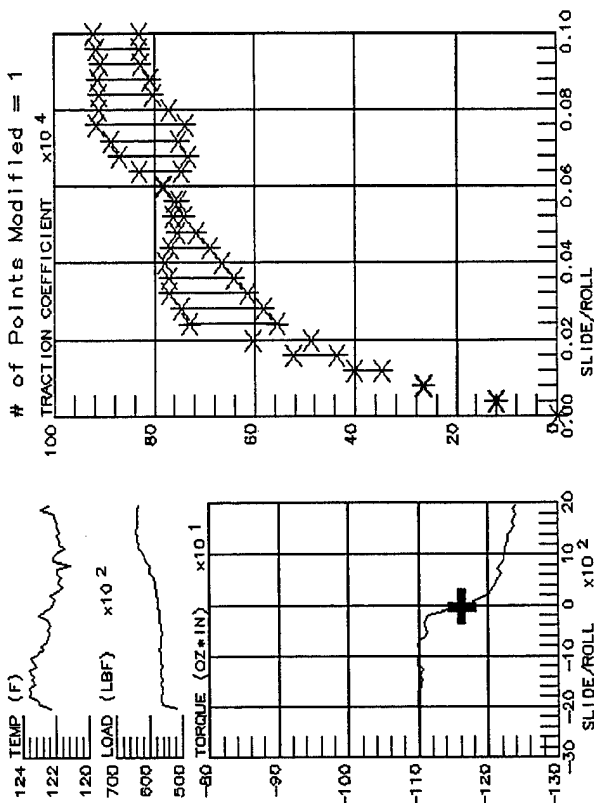
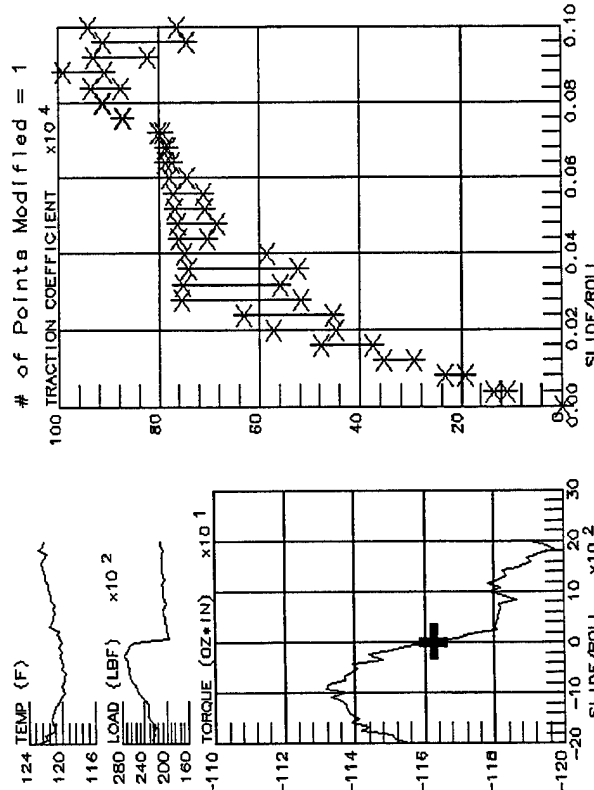
BB 89-105 Coray 100 new
120F 44LBF 3820RPM 5 FILE: bb120d

#77
BB 89-105 Coray 100 new
120F 75LBF 3820RPM 6 FILE: bb120d



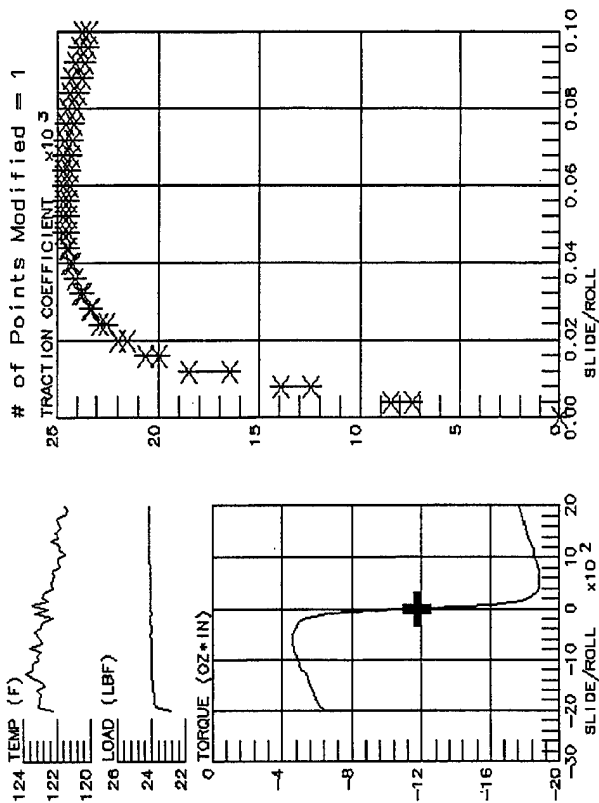
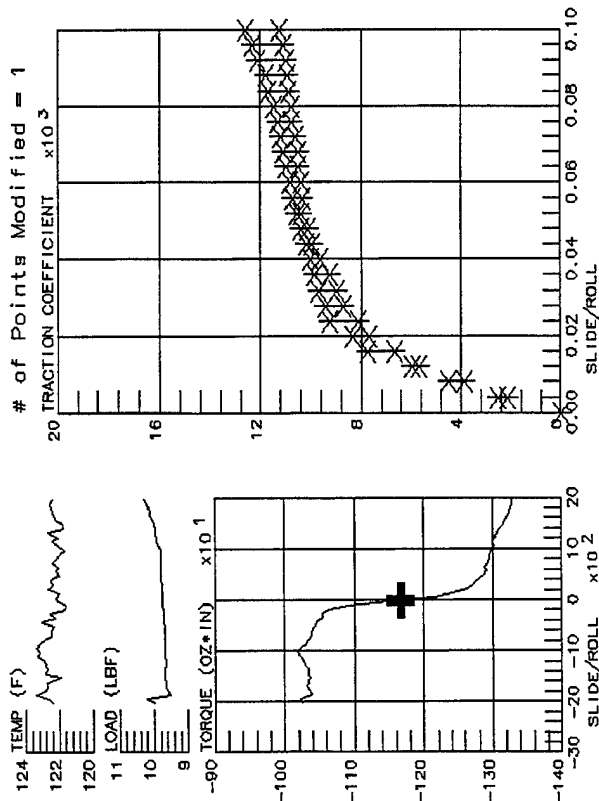
BB 89-105 Coray 100 new
120F 11LBF 5093RPM 1 FILE: bb120e

#79
BB 89-105 Coray 100 new
120F 5LBf 5093RPM 2 FILE: bb120e



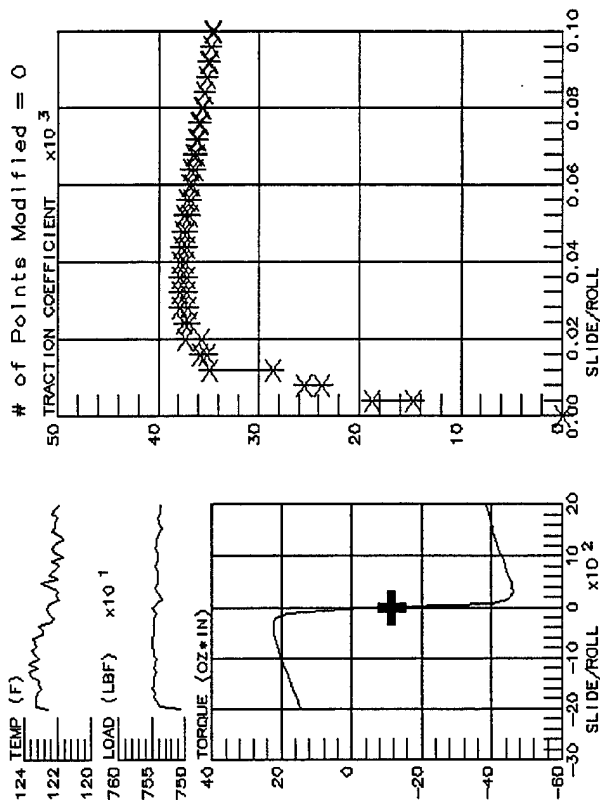
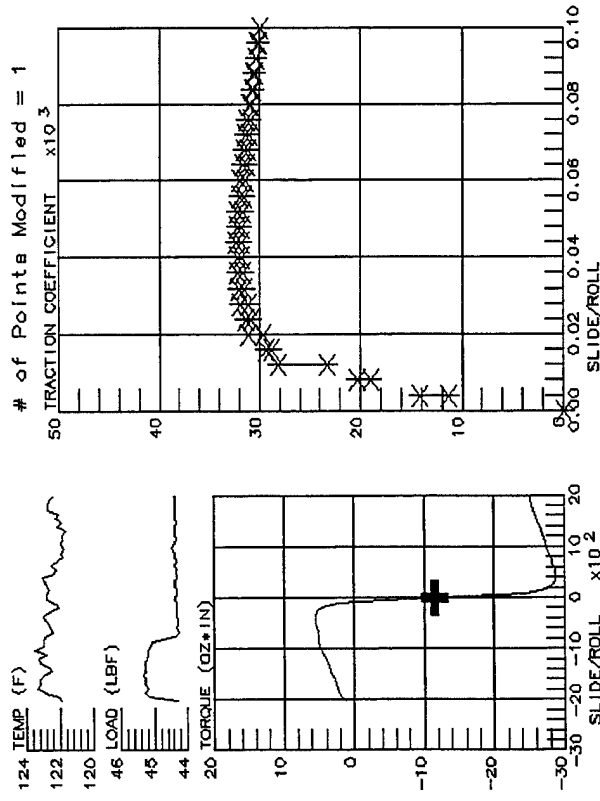
BB 89-105 Coray 100 new
120F 9LBF 5093RPM 3 FILE: bb120e

BB 89-105 Coray 100 new
120F 23LBF 5093RPM 4 FILE: bb120e



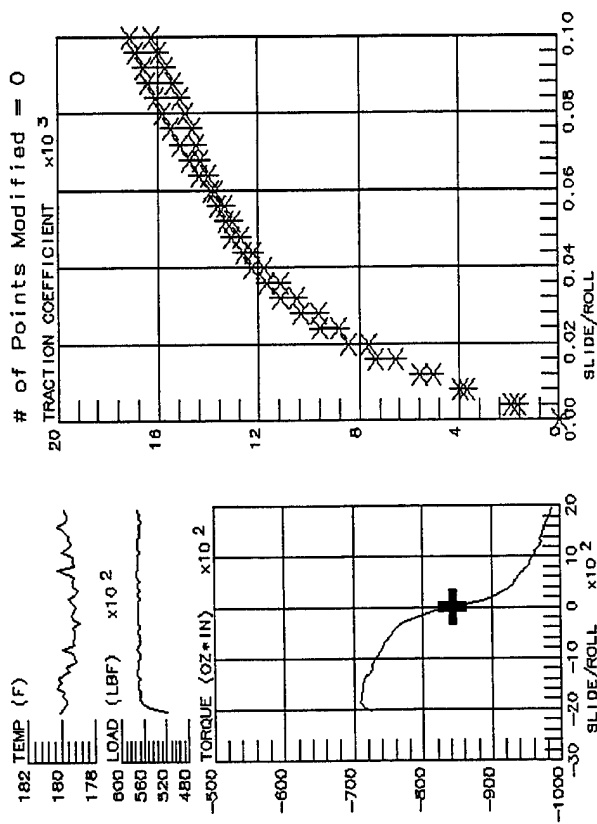
BB 89-105 Coray 100 new
120F 44LBF 5093RPM 5 FILE: bb120e

BB 89-105 Coray 100 new
120F 75LBF 5093RPM 6 FILE: bb120e



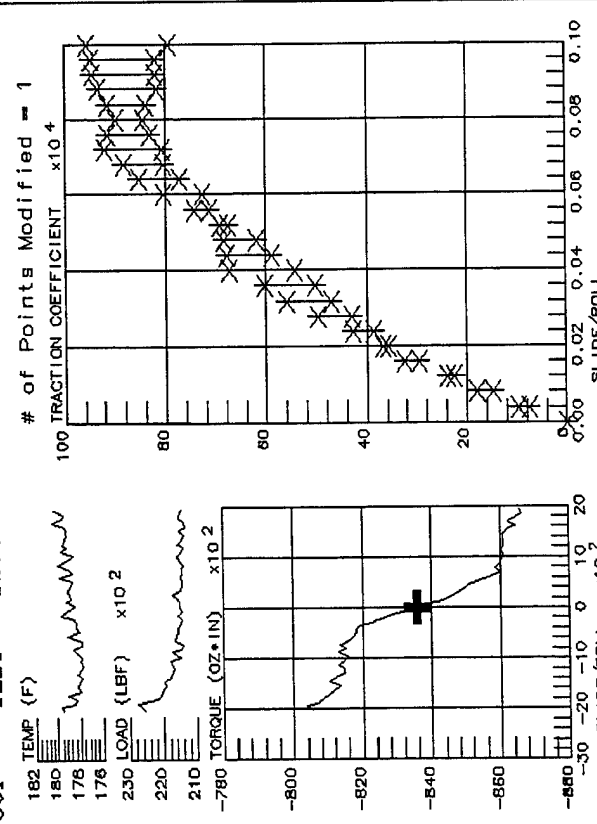
#86
BB 89-105 Coray 100 new
180F 5LBF 1273RPM 2 FILE: bb180b

of Points Modified = 0



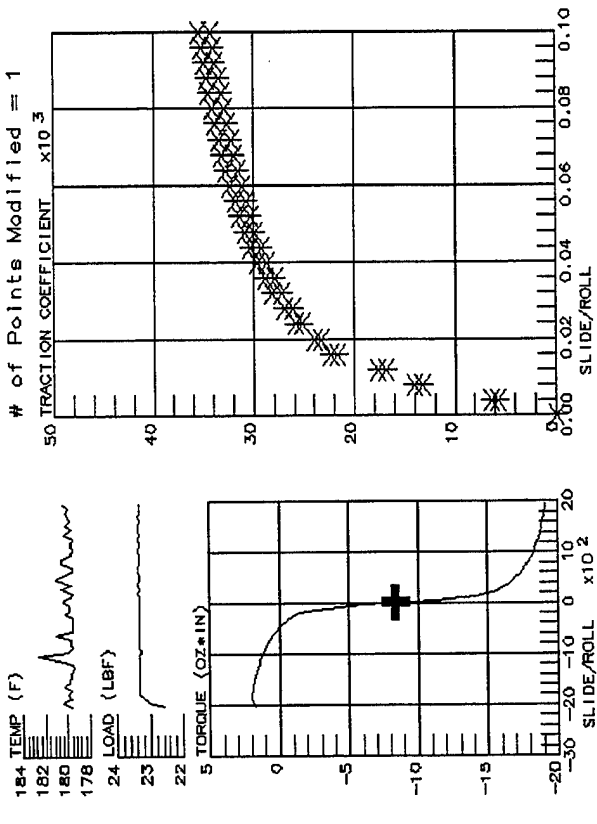
#85
BB 89-105 Coray 100 new
180F 1LBF 1273RPM 1 FILE: bb180b

of Points Modified = 1



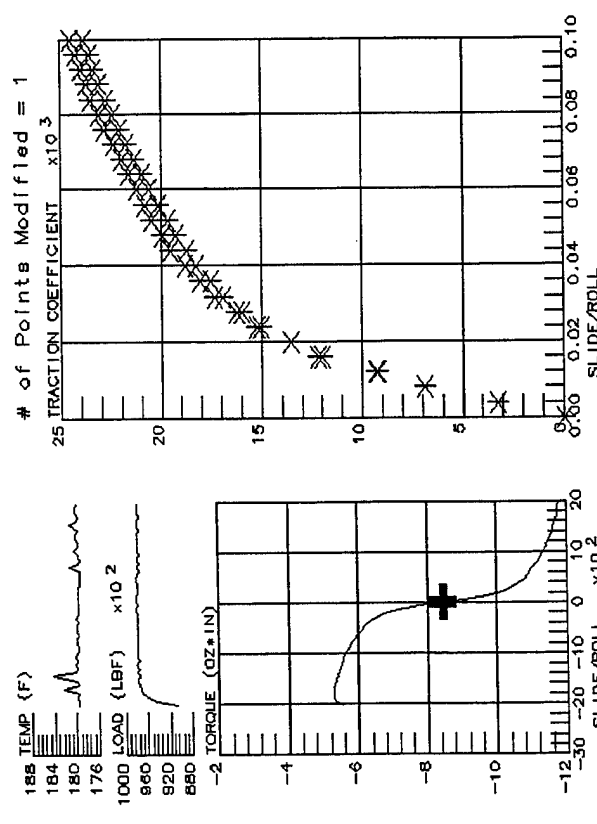
#88
BB 89-105 Coray 100 new
180F 23LBF 1273RPM 4 FILE: bb180b

of Points Modified = 1



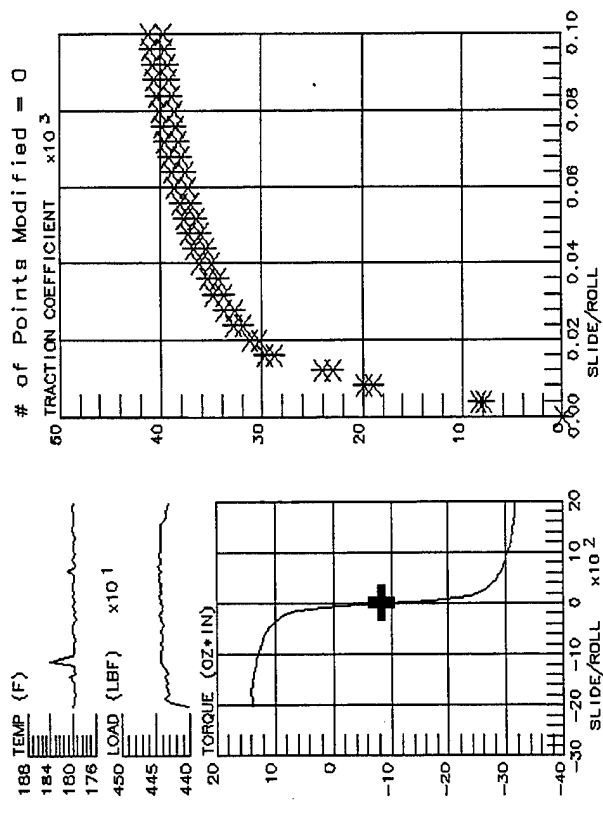
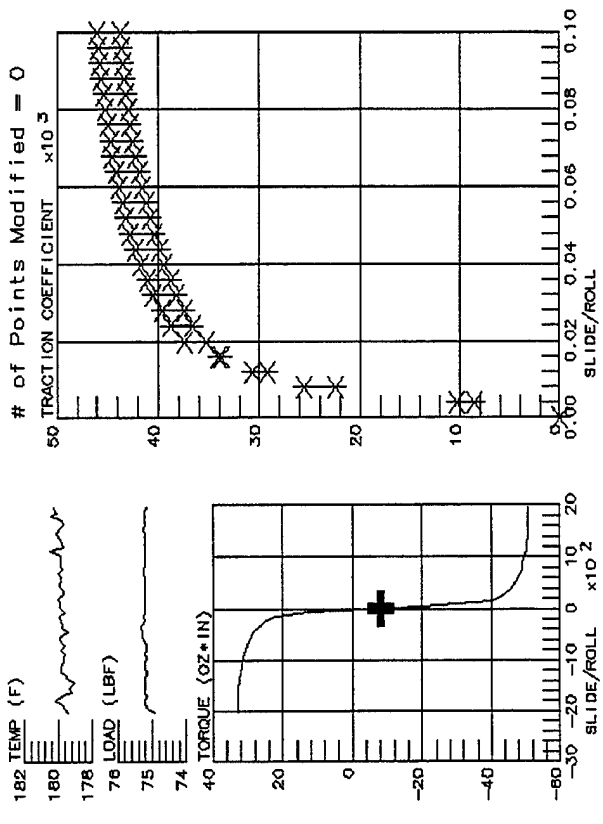
#87
BB 89-105 Coray 100 new
180F 9LBF 1273RPM 3 FILE: bb180b

of Points Modified = 1



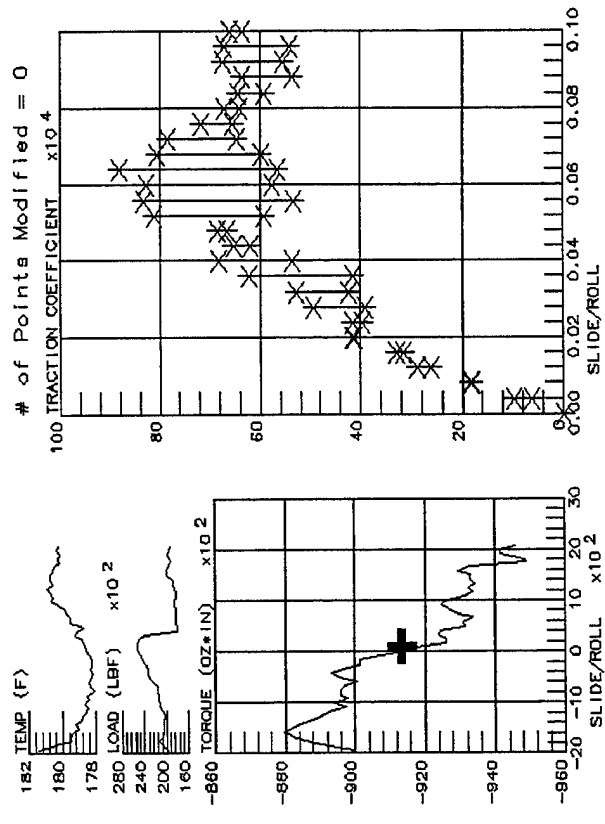
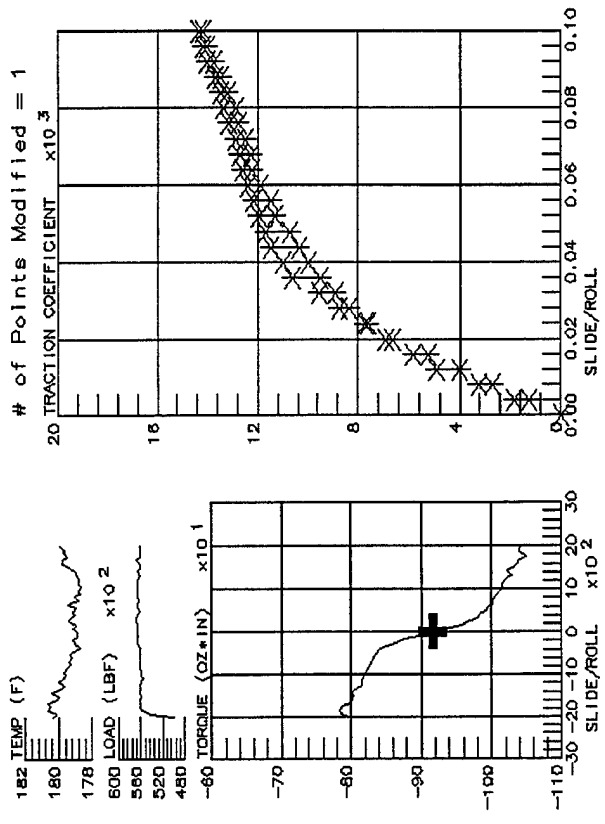
BB 89-105 Coray 100 new
180F 75LBF 1273RPM 6 FILE: bb180b

BB 89-105 Coray 100 new
180F 44LBF 1273RPM 5 FILE: bb180b



BB 89-105 Coray 100 new
180F 5LBF 2546RPM 2 FILE: bb180c

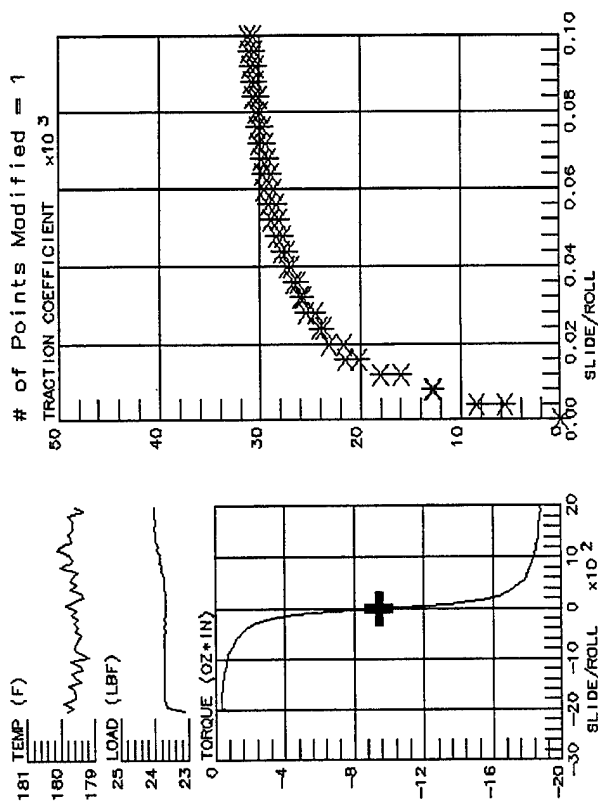
BB 89-105 Coray 100 new
180F 11LBF 2546RPM 1 FILE: bb180c



#94

BB 89-105 Coray 100 new
180F 23LBF 2546RPM 4 FILE: bb180c

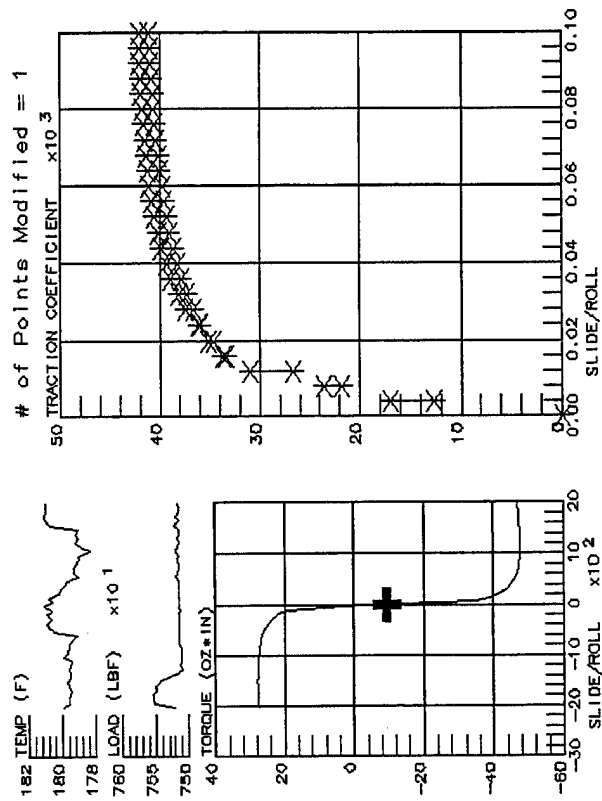
of Points Modified = 1



#96

BB 89-105 Coray 100 new
180F 75LBF 2546RPM 8 FILE: bb180c

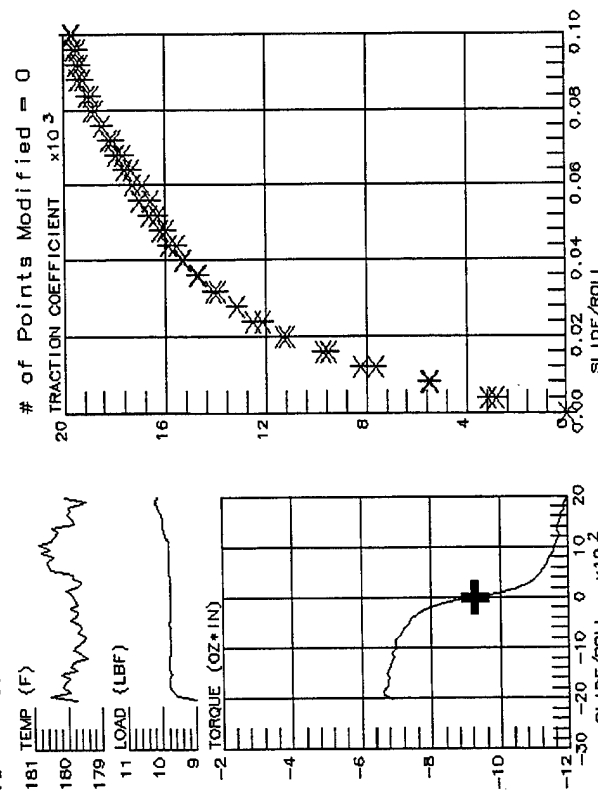
of Points Modified = 1



#93

BB 89-105 Coray 100 new
180F 9LBF 2546RPM 3 FILE: bb180c

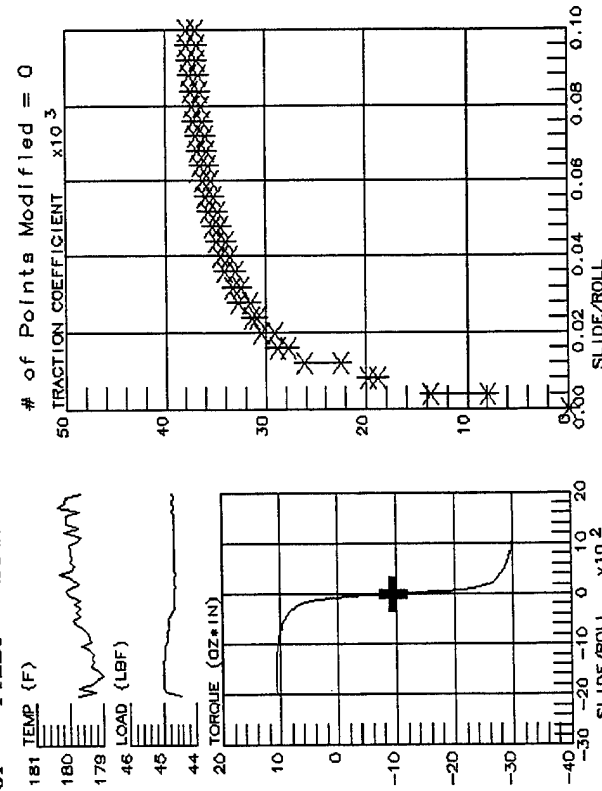
of Points Modified = 0



#95

BB 89-105 Coray 100 new
180F 44LBF 2546RPM 5 FILE: bb180c

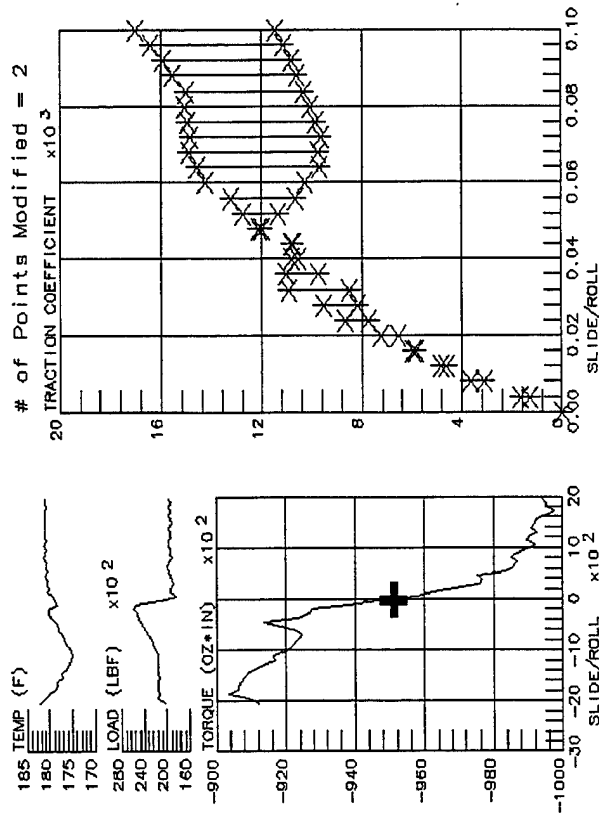
of Points Modified = 0



BB 89-105 Coray 100 new
180F 11BF 3820RPM 1 FILE: bb180d

#97

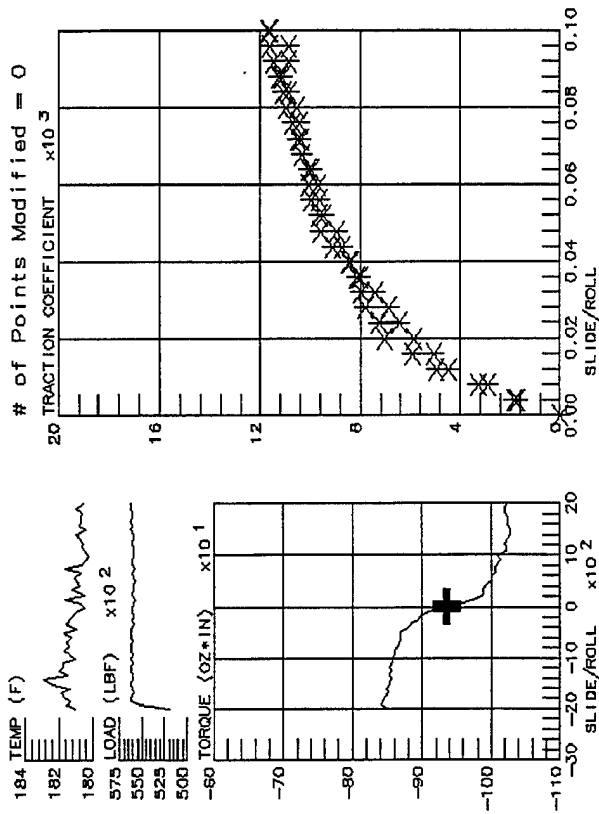
of Points Modified = 2



BB 89-105 Coray 100 new
180F 6LBF 3820RPM 2 FILE: bb180d

#98

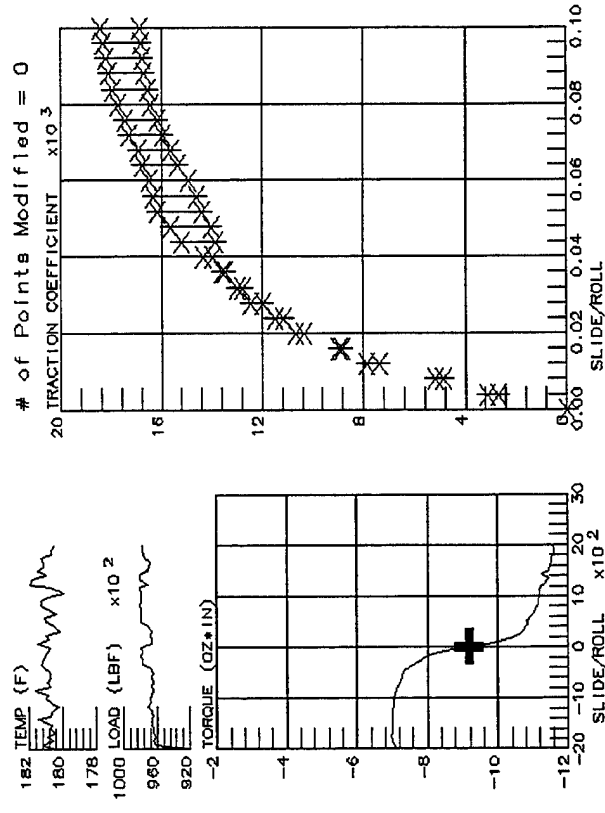
of Points Modified = 0



BB 89-105 Coray 100 new
180F 9LBF 3820RPM 3 FILE: bb180d

#99

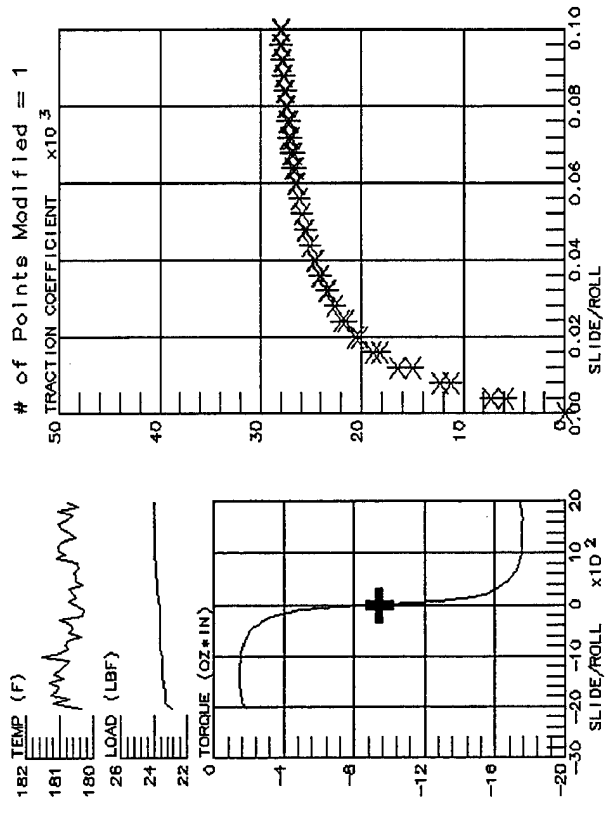
of Points Modified = 0



BB 89-105 Coray 100 new
180F 23LBF 3820RPM 4 FILE: bb180d

#100

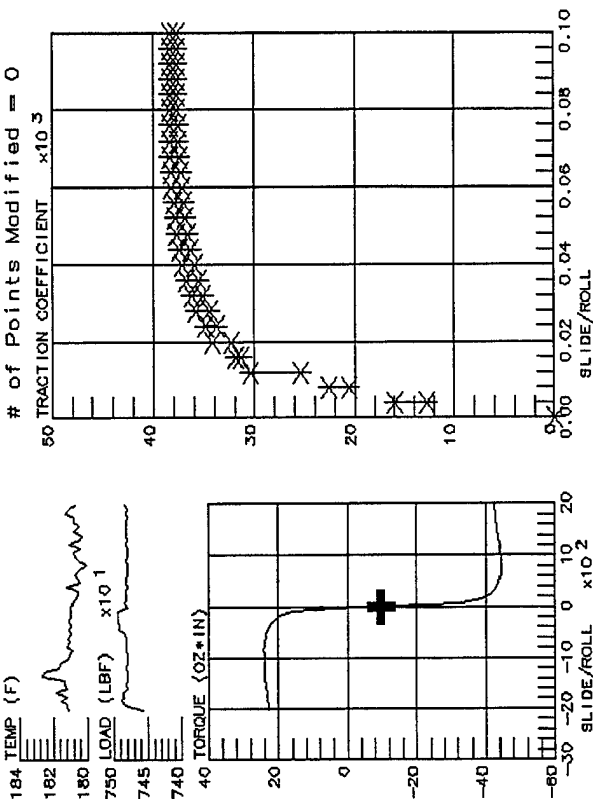
of Points Modified = 1



#102

BB 89-105 Coray 100 new
180F 75LBF 3820RPM 6 FILE: bb180d

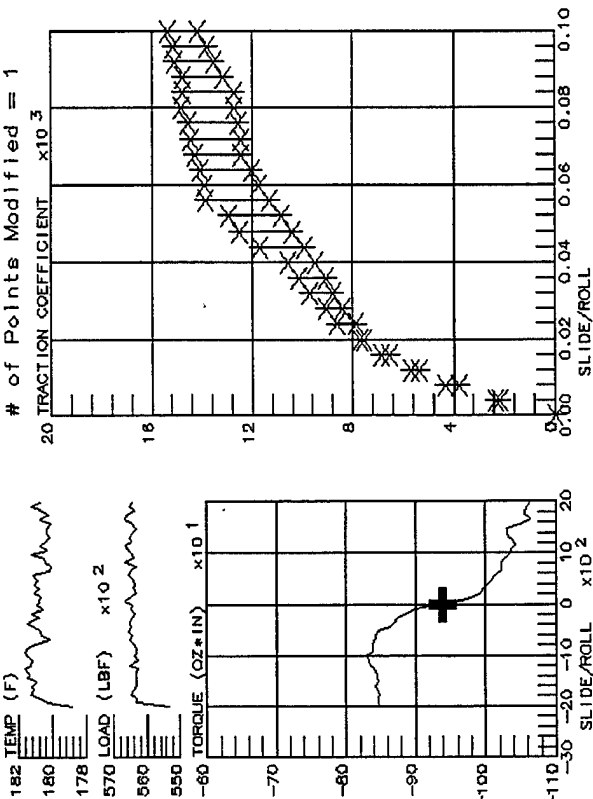
of Points Modified = 0



#104

BB 89-105 Coray 100 new
180F 5LBF 5093RPM 2 FILE: bb180e

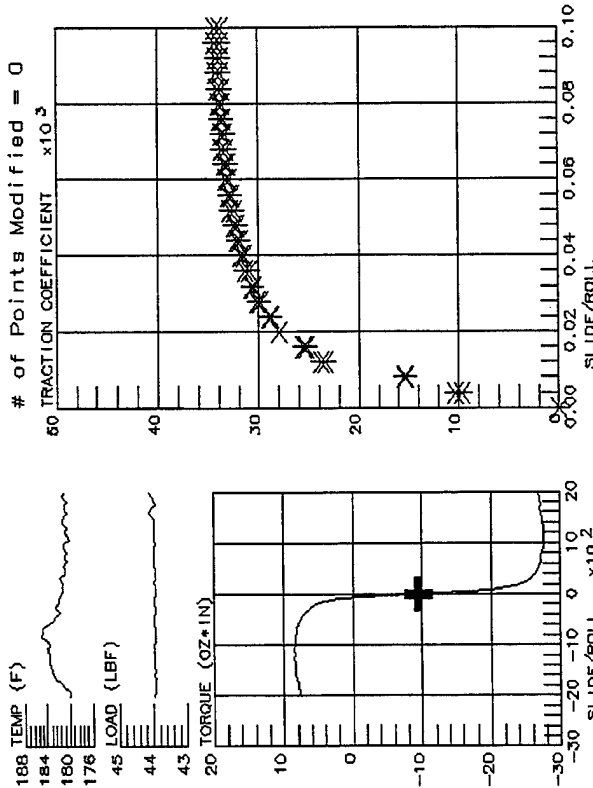
of Points Modified = 1



#101

BB 89-105 Coray 100 new
180F 44LBF 3820RPM 5 FILE: bb180d

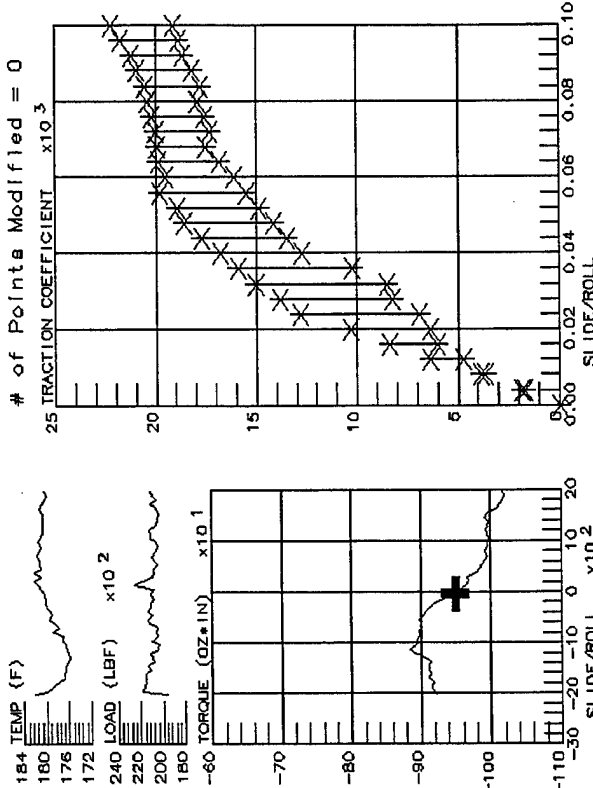
of Points Modified = 0



#103

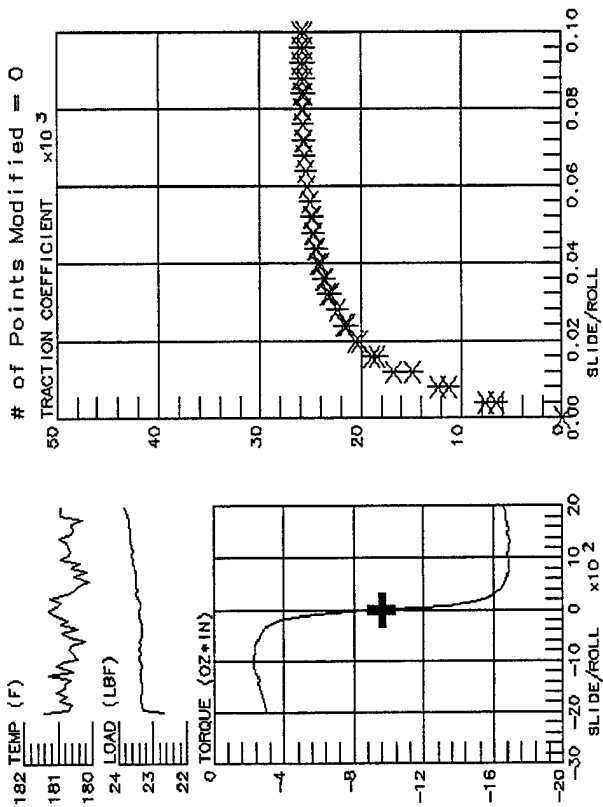
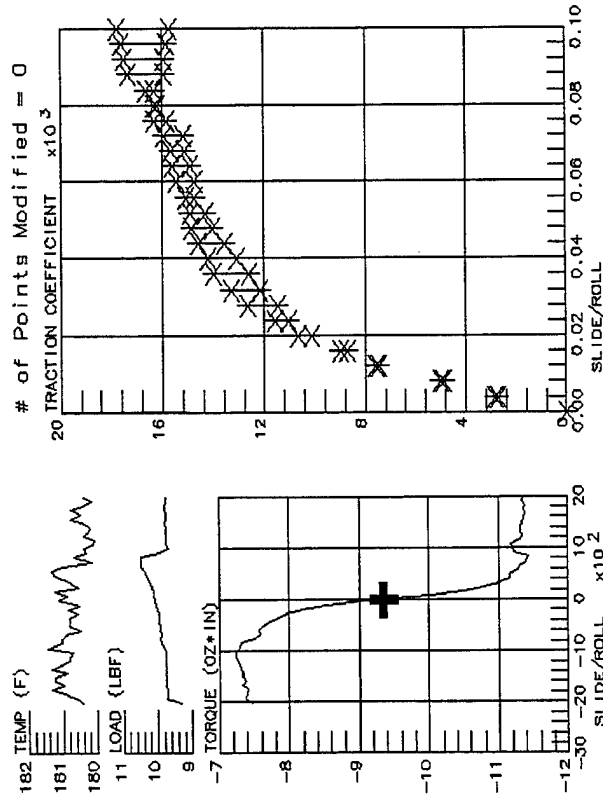
BB 89-105 Coray 100 new
180F 1LBF 5093RPM 1 FILE: bb180e

of Points Modified = 0



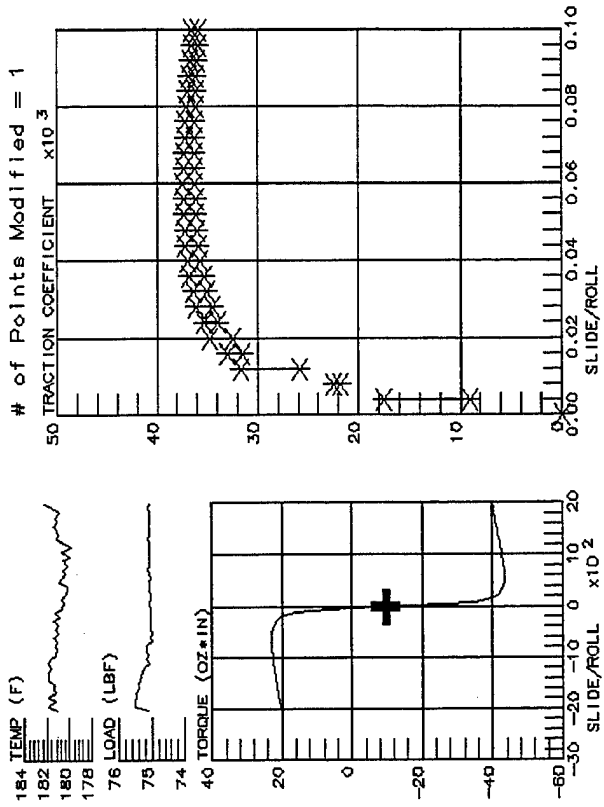
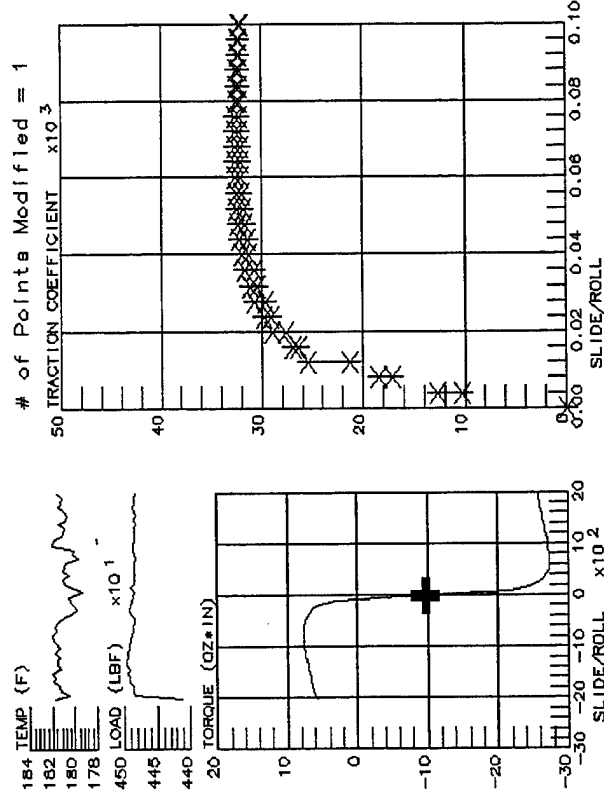
BB 89-105 Coray 100 new
180F 9LBF 5093RPM 3 FILE: bb180e

BB 89-105 Coray 100 new
180F 23LBF 5093RPM 4 FILE: bb180e



BB 89-105 Coray 100 new
180F 44LBF 5093RPM 5 FILE: bb180e

BB 89-105 Coray 100 new
180F 75LBF 5093RPM 6 FILE: bb180e



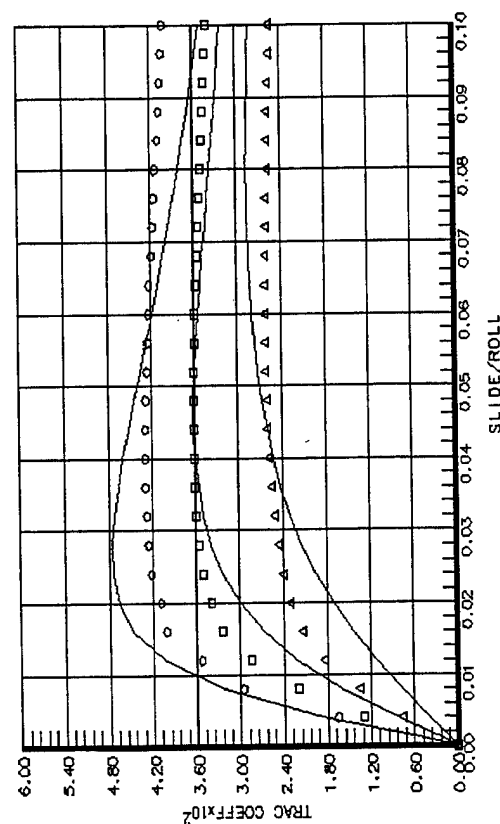
Lubricant name = BB 89-105 Coray 100 new

NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| bb1.dat | 2.9722E+02 | 5.0790E+00 | 2.1413E+00 | 7.5000E-09 | 1.4956E-01 |
| bb2.dat | 2.9722E+02 | 7.6206E+00 | 2.0089E+00 | 7.5000E-09 | 1.1819E-01 |
| bb3.dat | 2.9722E+02 | 1.0160E+01 | 1.0572E+00 | 7.5000E-09 | 9.2225E-02 |
| bb4.dat | 3.1111E+02 | 5.0790E+00 | 2.7423E+00 | 7.5000E-09 | 2.2425E-01 |
| bb5.dat | 3.1111E+02 | 7.6206E+00 | 1.7197E+00 | 7.5000E-09 | 1.5052E-01 |
| bb6.dat | 3.1111E+02 | 1.0160E+01 | 1.2113E+00 | 7.5000E-09 | 1.1576E-01 |
| bb7.dat | 3.2222E+02 | 5.0790E+00 | 2.2774E+00 | 7.5000E-09 | 2.8345E-01 |
| bb8.dat | 3.2222E+02 | 7.6206E+00 | 9.2528E-01 | 7.5000E-09 | 1.8020E-01 |
| bb9.dat | 3.2222E+02 | 1.0160E+01 | 7.8230E-01 | 7.5000E-09 | 1.3905E-01 |
| bb10.dat | 3.5556E+02 | 5.0790E+00 | 4.0157E-01 | 7.5000E-09 | 6.3284E-01 |
| bb11.dat | 3.5556E+02 | 7.6206E+00 | 3.6886E-01 | 7.5000E-09 | 3.5178E-01 |
| bb12.dat | 3.5556E+02 | 1.0160E+01 | 2.8754E-01 | 7.5000E-09 | 2.3705E-01 |

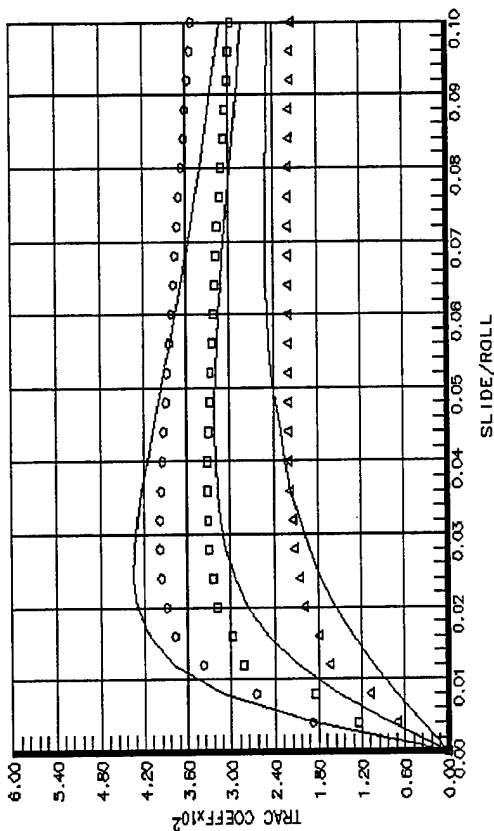
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1 bb1.dat

ALFA* BETA*
XMU*
88MPA 102N 5.08M/S 297K # 15 2.141E+00 7.500E-09 1.496E-01
846MPA 196N 5.08M/S 297K # 17 2.141E+00 7.500E-09 1.496E-01
1012MPA 334N 5.08M/S 297K # 18 2.141E+00 7.500E-09 1.496E-01



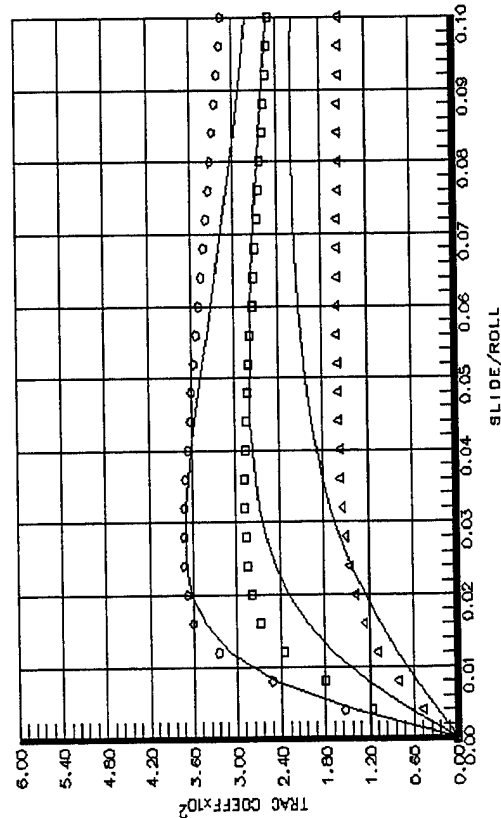
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1 bb2.dat

ALFA* BETA*
XMU*
88MPA 102N 7.82M/S 297K # 22 2.002E+00 7.500E-09 1.182E-01
852MPA 196N 7.82M/S 297K # 23 2.002E+00 7.500E-09 1.182E-01
1013MPA 334N 7.82M/S 297K # 24 2.002E+00 7.500E-09 1.182E-01



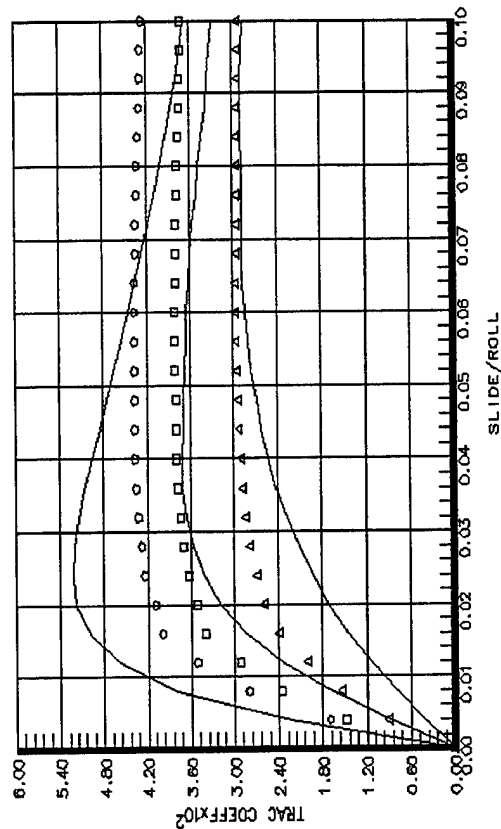
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1 bb3.dat

ALFA* BETA*
XMU*
88MPA 102N 10.16M/S 297K # 28 1.057E+00 7.500E-09 9.223E-02
855MPA 196N 10.16M/S 297K # 29 1.057E+00 7.500E-09 9.223E-02
1016MPA 334N 10.16M/S 297K # 30 1.057E+00 7.500E-09 9.223E-02

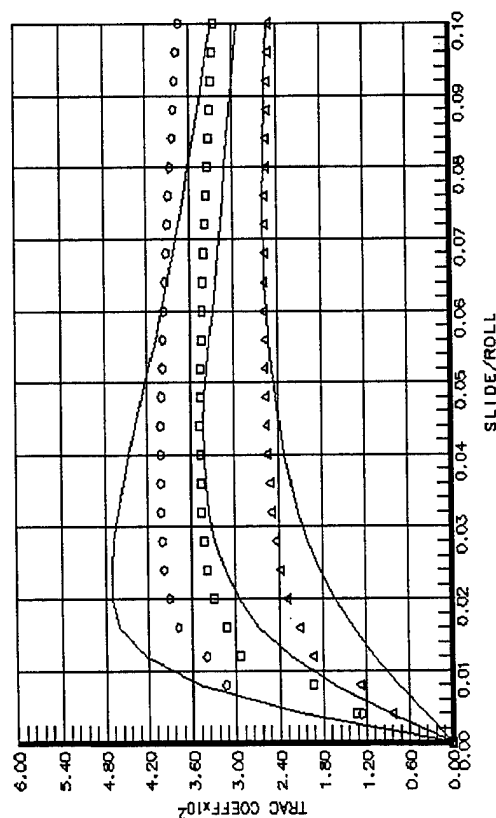


BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1 bb4.dat

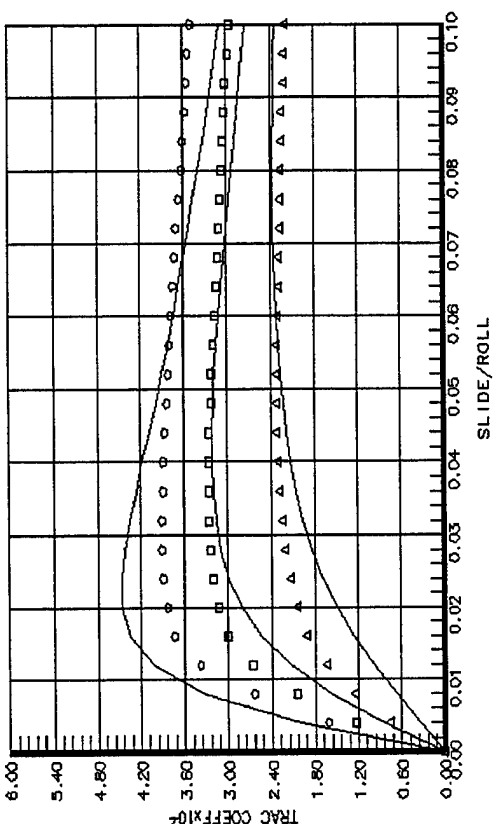
ALFA* BETA*
XMU*
88MPA 102N 5.08M/S 311K # 48 2.742E+00 7.500E-09 2.242E-01
853MPA 196N 5.08M/S 311K # 47 2.742E+00 7.500E-09 2.242E-01
1012MPA 334N 5.08M/S 311K # 48 2.742E+00 7.500E-09 2.242E-01



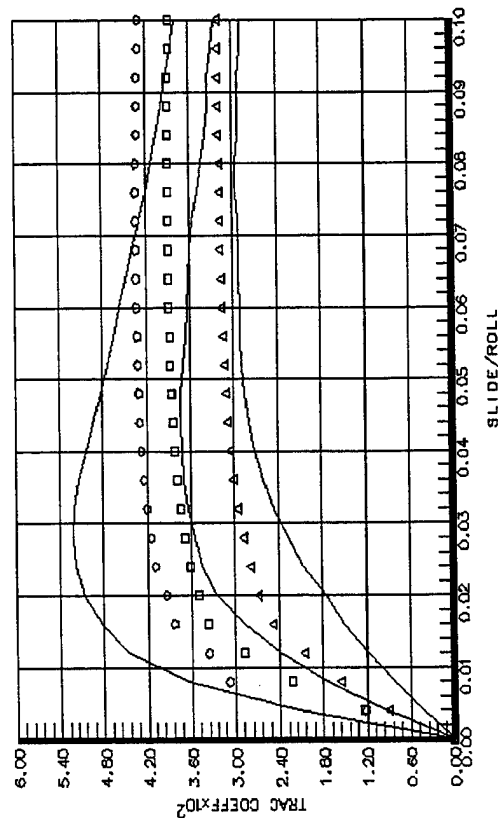
BB 89-105 Coray 100 new
NEWTONIAN MODEL
 TYPE 1
 XMU*
 ALFA*
 BETA*
 102N 7.62M/S 311K # 52 1.720E+00 7.500E-09 1.505E-01
 196N 7.62M/S 311K # 53 1.720E+00 7.500E-09 1.505E-01
 334N 7.62M/S 311K # 54 1.720E+00 7.500E-09 1.505E-01
 891MPA
 845MPA
 1013MPA



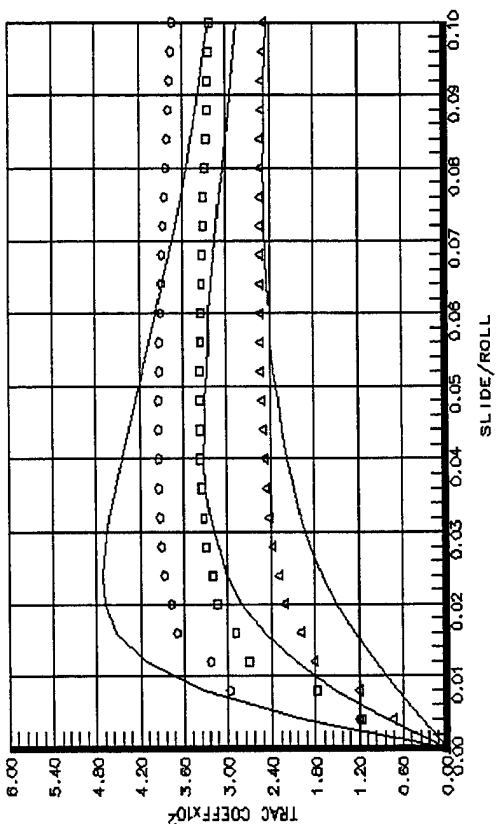
BB 89-105 Coray 100 new
NEWTONIAN MODEL
 TYPE 1
 XMU*
 ALFA*
 BETA*
 102N 10.16M/S 311K # 58 1.211E+00 7.500E-09 1.158E-01
 196N 10.16M/S 311K # 59 1.211E+00 7.500E-09 1.158E-01
 334N 10.16M/S 311K # 60 1.211E+00 7.500E-09 1.158E-01
 856MPA
 853MPA
 1012MPA



BB 89-105 Coray 100 new
NEWTONIAN MODEL
 TYPE 1
 XMU*
 ALFA*
 BETA*
 102N 5.08M/S 322K # 70 2.277E+00 7.500E-09 2.835E-01
 196N 5.08M/S 322K # 71 2.277E+00 7.500E-09 2.835E-01
 334N 5.08M/S 322K # 72 2.277E+00 7.500E-09 2.835E-01
 692MPA
 856MPA
 1013MPA

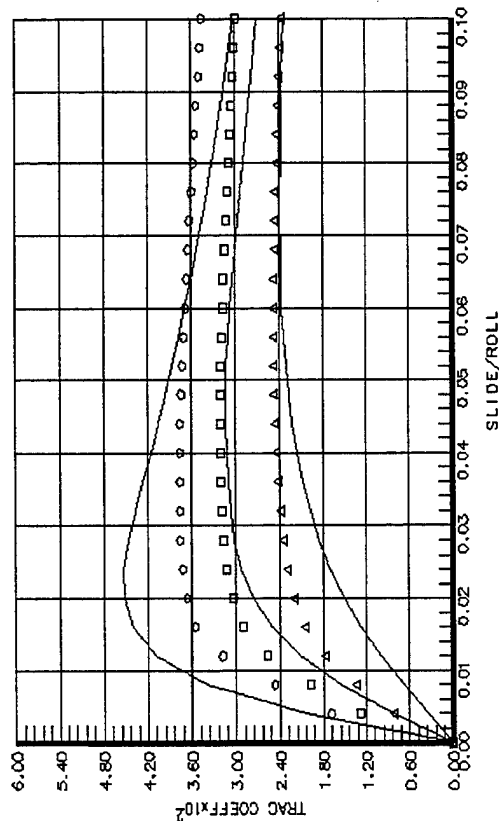


BB 89-105 Coray 100 new
NEWTONIAN MODEL
 TYPE 1
 XMU*
 ALFA*
 BETA*
 102N 7.62M/S 322K # 78 9.253E-01 7.500E-09 1.802E-01
 196N 7.62M/S 322K # 77 9.253E-01 7.500E-09 1.802E-01
 334N 7.62M/S 322K # 78 9.253E-01 7.500E-09 1.802E-01
 685MPA
 850MPA
 1013MPA



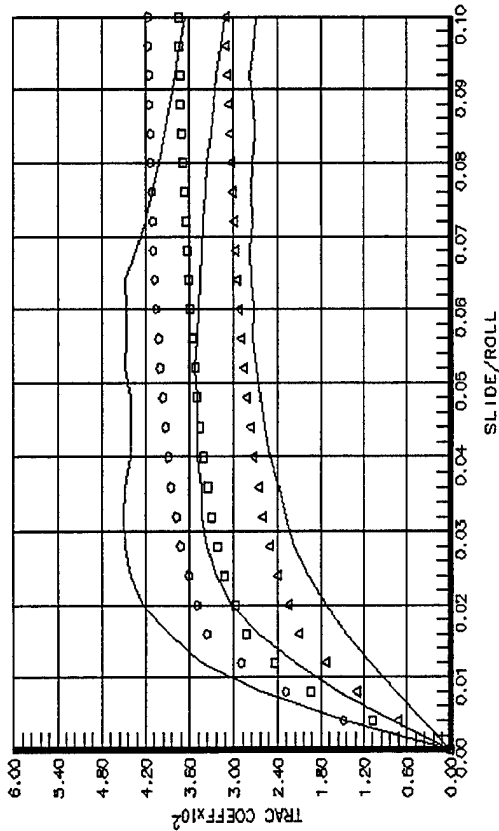
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1

bb9.dat
 894MPa 102N 10.16M/S 322K # 82 7.823E-01 7.823E-01 7.823E-01 1.391E-01 BETA*
 852MPa 196N 10.16M/S 322K # 83 7.823E-01 7.823E-01 7.823E-01 1.391E-01 ALFA*
 1015MPa 334N 10.16M/S 322K # 84 7.823E-01 7.823E-01 7.823E-01 1.391E-01 XMU*



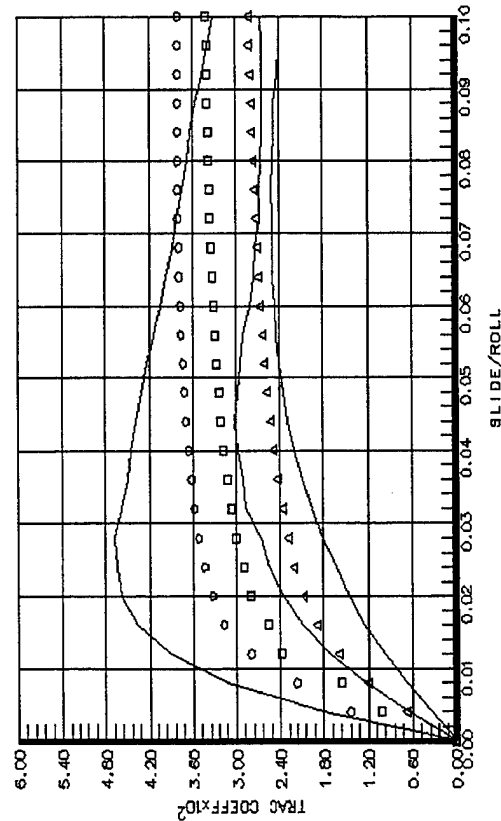
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1

bb10.dat
 891MPa 102N 5.08M/S 355K # 94 4.018E-01 7.500E-08 8.328E-01 BETA*
 853MPa 196N 5.08M/S 355K # 95 4.018E-01 7.500E-08 8.328E-01 ALFA*
 1015MPa 334N 5.08M/S 355K # 96 4.018E-01 7.500E-08 8.328E-01 XMU*



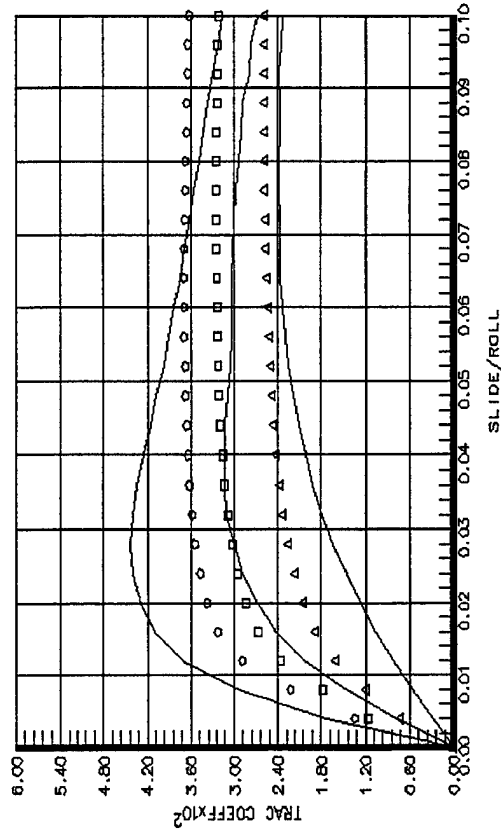
BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1

bb11.dat
 891MPa 102N 7.62M/S 355K #100 3.888E-01 7.500E-08 3.518E-01 BETA*
 848MPa 196N 7.62M/S 355K #101 3.888E-01 7.500E-08 3.518E-01 ALFA*
 1013MPa 334N 7.62M/S 355K #102 3.888E-01 7.500E-08 3.518E-01 XMU*



BB 89-105 Coray 100 new
NEWTONIAN MODEL TYPE 1

bb12.dat
 888MPa 102N 10.16M/S 355K #108 2.875E-01 7.500E-08 2.371E-01 BETA*
 854MPa 196N 10.16M/S 355K #107 2.875E-01 7.500E-08 2.371E-01 ALFA*
 1014MPa 334N 10.16M/S 355K #106 2.875E-01 7.500E-08 2.371E-01 XMU*



6. Traction Data Set E: 89-105 Coray 100 Used

Data set name: BC 89-126 Coray 100 used
 Rolling radii [Disks 1 & 2] (in): 0.75 0.75
 Crown radii [Disks 1 & 2] (in): 9.50 9.90

Number of data sets found = 108

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 75.00 | 1.35 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.56E-05 | bc75a #1 |
| 2 | 75.00 | 4.90 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.81E-05 | bc75a #2 |
| 3 | 75.00 | 9.16 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.16E-04 | bc75a #3 |
| 4 | 75.00 | 22.65 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.48E-04 | bc75a #4 |
| 5 | 75.00 | 43.95 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.86E-04 | bc75a #5 |
| 6 | 75.00 | 75.19 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.84E-03 | bc75a #6 |
| 7 | 75.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.25E-05 | bc75b #1 |
| 8 | 75.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.70E-06 | bc75b #2 |
| 9 | 75.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.53E-06 | bc75b #3 |
| 10 | 75.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.10E-05 | bc75b #4 |
| 11 | 75.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.39E-05 | bc75b #5 |
| 12 | 75.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.21E-04 | bc75b #6 |
| 13 | 75.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.91E-04 | bc75c #1 |
| 14 | 75.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.72E-04 | bc75c #2 |
| 15 | 75.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.95E-06 | bc75c #3 |
| 16 | 75.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.83E-06 | bc75c #4 |
| 17 | 75.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.11E-05 | bc75c #5 |
| 18 | 75.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.19E-04 | bc75c #6 |
| 19 | 75.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.26E-03 | bc75d #1 |
| 20 | 75.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.47E-04 | bc75d #2 |
| 21 | 75.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.35E-06 | bc75d #3 |
| 22 | 75.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.12E-05 | bc75d #4 |
| 23 | 75.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.20E-05 | bc75d #5 |
| 24 | 75.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.03E-05 | bc75d #6 |
| 25 | 75.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.84E-03 | bc75e #1 |
| 26 | 75.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.11E-06 | bc75e #2 |
| 27 | 75.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.64E-02 | bc75e #3 |
| 28 | 75.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.74E-05 | bc75e #4 |
| 29 | 75.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.69E-05 | bc75e #5 |
| 30 | 75.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.24E-04 | bc75e #6 |
| 31 | 100.00 | 1.35 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.49E-04 | bc100a #1 |
| 32 | 100.00 | 4.90 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.87E-05 | bc100a #2 |
| 33 | 100.00 | 9.16 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.37E-04 | bc100a #3 |
| 34 | 100.00 | 22.65 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.90E-04 | bc100a #4 |
| 35 | 100.00 | 43.95 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.92E-04 | bc100a #5 |
| 36 | 100.00 | 75.19 | 255.20 | 311.20 | 283.20 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.99E-03 | bc100a #6 |
| 37 | 100.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.93E-05 | bc100b #1 |
| 38 | 100.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.02E-05 | bc100b #2 |
| 39 | 100.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.94E-05 | bc100b #3 |
| 40 | 100.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.50E-05 | bc100b #4 |
| 41 | 100.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.86E-05 | bc100b #5 |
| 42 | 100.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.67E-04 | bc100b #6 |
| 43 | 100.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.60E-05 | bc100c #1 |
| 44 | 100.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.43E-06 | bc100c #2 |
| 45 | 100.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.94E-06 | bc100c #3 |
| 46 | 100.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.03E-06 | bc100c #4 |
| 47 | 100.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.41E-05 | bc100c #5 |
| 48 | 100.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.00E-04 | bc100c #6 |
| 49 | 100.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.07E-04 | bc100d #1 |
| 50 | 100.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.31E-04 | bc100d #2 |

Data set: BC 89-126 Coray 100 usedcontinued

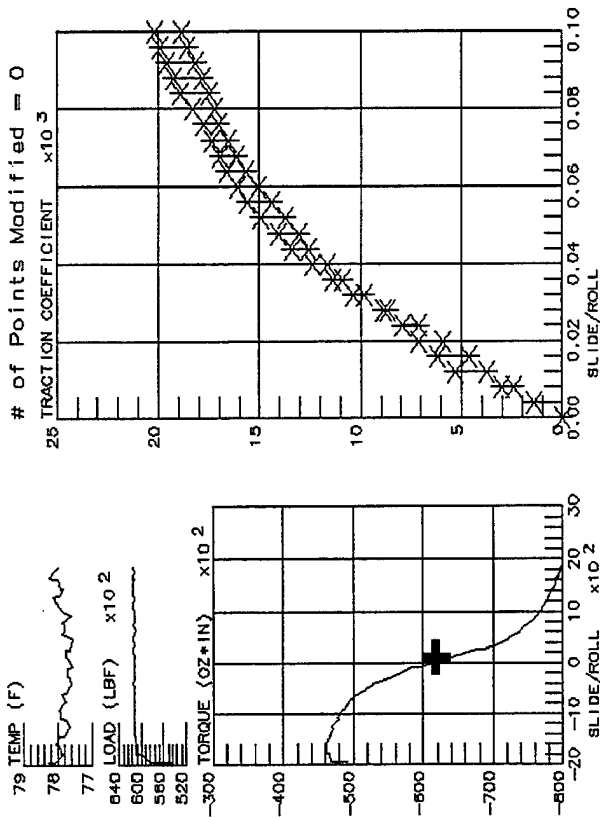
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.19E-05 | bc100d #3 |
| 52 | 100.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.47E-06 | bc100d #4 |
| 53 | 100.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.19E-05 | bc100d #5 |
| 54 | 100.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.03E-04 | bc100d #6 |
| 55 | 100.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.47E-06 | bc100e #1 |
| 56 | 100.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.54E-06 | bc100e #2 |
| 57 | 100.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.36E-05 | bc100e #3 |
| 58 | 100.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 9.62E-06 | bc100e #4 |
| 59 | 100.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.84E-05 | bc100e #5 |
| 60 | 100.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.34E-04 | bc100e #6 |
| 61 | 120.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.35E-05 | bc120b #1 |
| 62 | 120.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.25E-05 | bc120b #2 |
| 63 | 120.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.65E-05 | bc120b #3 |
| 64 | 120.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.55E-05 | bc120b #4 |
| 65 | 120.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.87E-05 | bc120b #5 |
| 66 | 120.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.69E-04 | bc120b #6 |
| 67 | 120.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.58E-03 | bc120c #1 |
| 68 | 120.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.45E-05 | bc120c #2 |
| 69 | 120.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.41E-06 | bc120c #3 |
| 70 | 120.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.54E-06 | bc120c #4 |
| 71 | 120.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.08E-05 | bc120c #5 |
| 72 | 120.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.79E-04 | bc120c #6 |
| 73 | 120.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.14E-04 | bc120d #1 |
| 74 | 120.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.99E-05 | bc120d #2 |
| 75 | 120.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.37E-05 | bc120d #3 |
| 76 | 120.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.04E-06 | bc120d #4 |
| 77 | 120.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.58E-05 | bc120d #5 |
| 78 | 120.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 8.48E-05 | bc120d #6 |
| 79 | 120.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.46E-04 | bc120e #1 |
| 80 | 120.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.07E-04 | bc120e #2 |
| 81 | 120.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 3.68E-05 | bc120e #3 |
| 82 | 120.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.87E-05 | bc120e #4 |
| 83 | 120.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.58E-05 | bc120e #5 |
| 84 | 120.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.60E-04 | bc120e #6 |
| 85 | 180.00 | 1.35 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.71E-05 | bc180b #1 |
| 86 | 180.00 | 4.90 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.21E-05 | bc180b #2 |
| 87 | 180.00 | 9.16 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.62E-05 | bc180b #3 |
| 88 | 180.00 | 22.65 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.71E-05 | bc180b #4 |
| 89 | 180.00 | 43.95 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.58E-05 | bc180b #5 |
| 90 | 180.00 | 75.19 | 1146.00 | 1400.00 | 1273.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.40E-04 | bc180b #6 |
| 91 | 180.00 | 1.35 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.68E-04 | bc180c #1 |
| 92 | 180.00 | 4.90 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.52E-06 | bc180c #2 |
| 93 | 180.00 | 9.16 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.44E-06 | bc180c #3 |
| 94 | 180.00 | 22.65 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.68E-05 | bc180c #4 |
| 95 | 180.00 | 43.95 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 4.67E-05 | bc180c #5 |
| 96 | 180.00 | 75.19 | 2291.20 | 2800.00 | 2545.60 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 7.45E-05 | bc180c #6 |
| 97 | 180.00 | 1.35 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.00E-05 | bc180d #1 |
| 98 | 180.00 | 4.90 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.04E-05 | bc180d #2 |
| 99 | 180.00 | 9.16 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 2.08E-05 | bc180d #3 |
| 100 | 180.00 | 22.65 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.82E-06 | bc180d #4 |
| 101 | 180.00 | 43.95 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.34E-05 | bc180d #5 |
| 102 | 180.00 | 75.19 | 3438.00 | 4202.00 | 3820.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.11E-04 | bc180d #6 |
| 103 | 180.00 | 1.35 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.77E-04 | bc180e #1 |
| 104 | 180.00 | 4.90 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.19E-05 | bc180e #2 |
| 105 | 180.00 | 9.16 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 6.10E-06 | bc180e #3 |
| 106 | 180.00 | 22.65 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.44E-05 | bc180e #4 |
| 107 | 180.00 | 43.95 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 5.20E-05 | bc180e #5 |
| 108 | 180.00 | 75.19 | 4584.00 | 5602.00 | 5093.00 | 49 | 0.71 | 1.49 | 0.40 | 0.40 | 1.00 | 1.60E-04 | bc180e #6 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|---------|-------------|
| bc1.dat | 75.00 | 2546.00 | 16 17 18 |
| bc2.dat | 75.00 | 3820.00 | 22 23 24 |
| bc3.dat | 75.00 | 5093.00 | 28 29 30 |
| bc4.dat | 100.00 | 2546.00 | 46 47 48 |
| bc5.dat | 100.00 | 3820.00 | 52 53 54 |
| bc6.dat | 100.00 | 5093.00 | 58 59 60 |
| bc7.dat | 120.00 | 2546.00 | 70 71 72 |
| bc8.dat | 120.00 | 3820.00 | 76 77 78 |
| bc9.dat | 120.00 | 5093.00 | 82 83 84 |
| bc10.dat | 180.00 | 2546.00 | 94 95 96 |
| bc11.dat | 180.00 | 3820.00 | 100 101 102 |
| bc12.dat | 180.00 | 5093.00 | 106 107 108 |

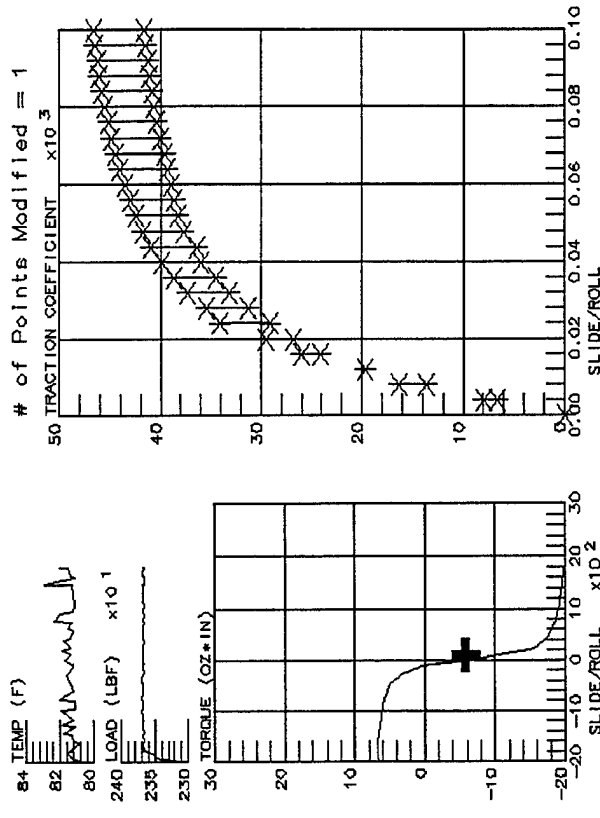
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BC 89-126 Coray 100 used
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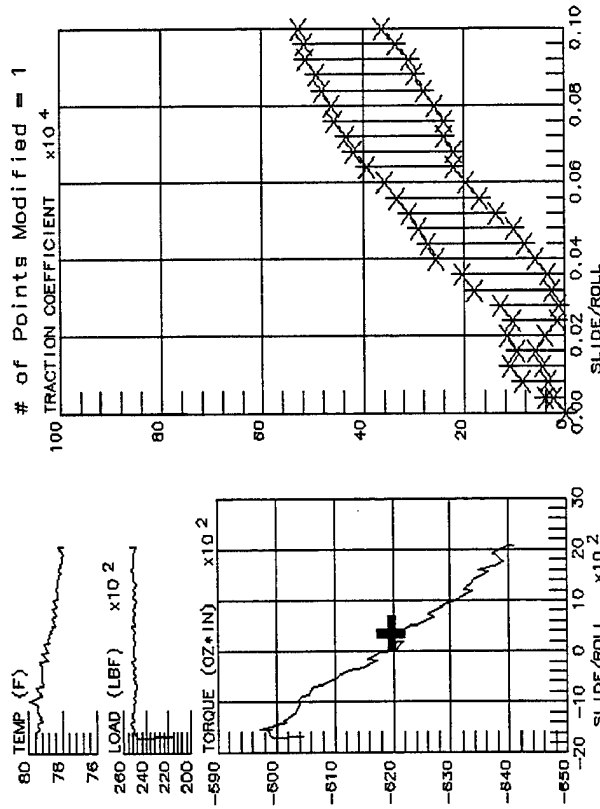
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BC 89-126 Coray 100 used
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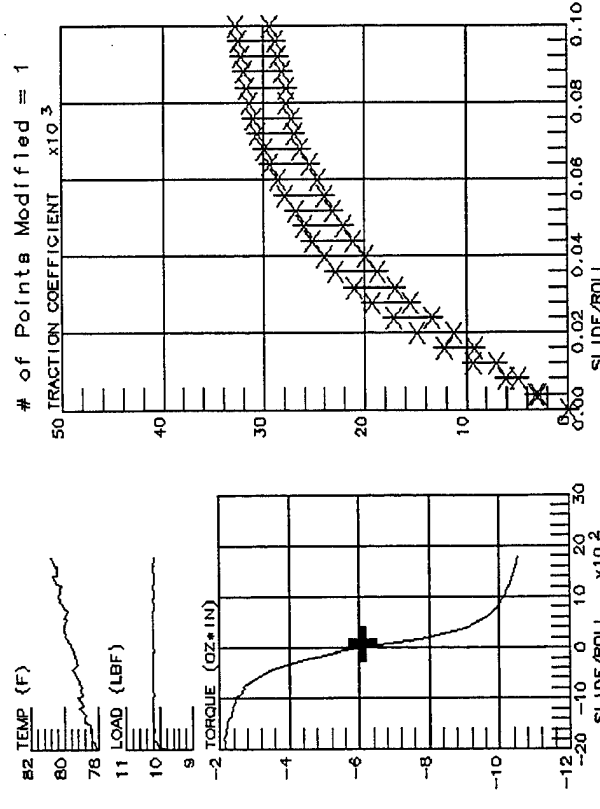
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#3

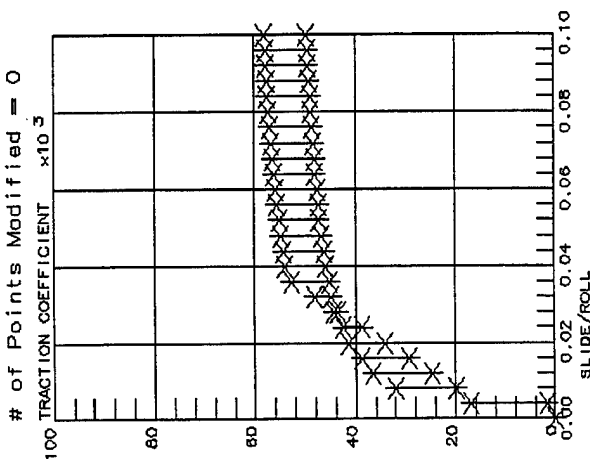
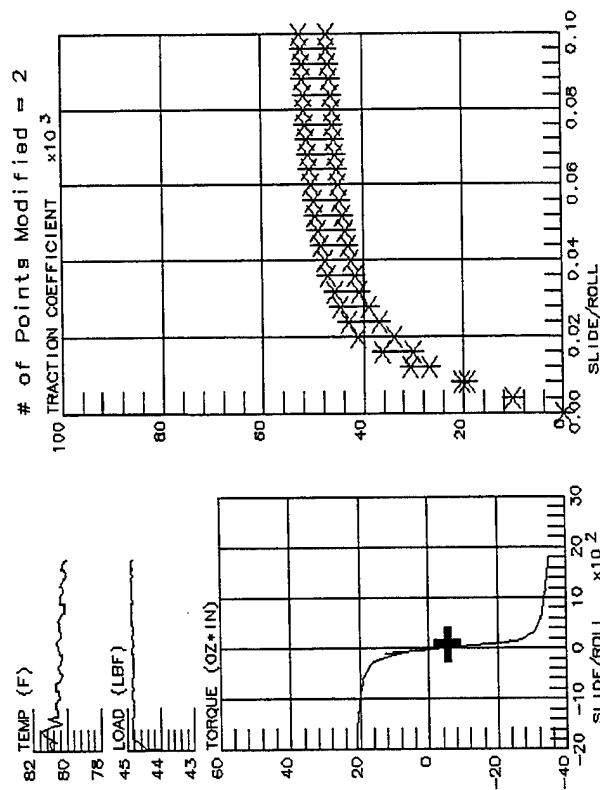
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BC 89-126 Coray 100 used
75F 44LBF 283RPM 5 FILE: bc75a

#5

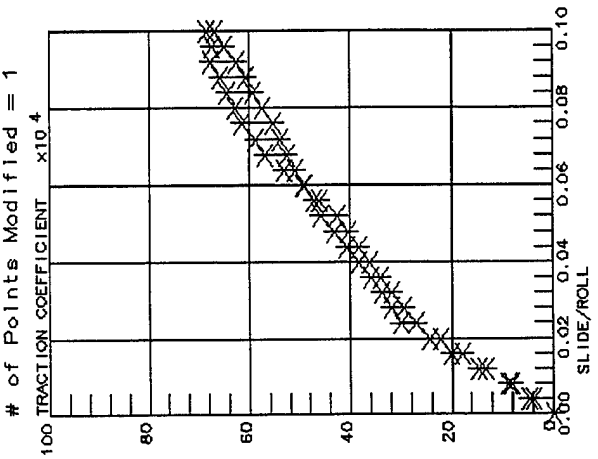
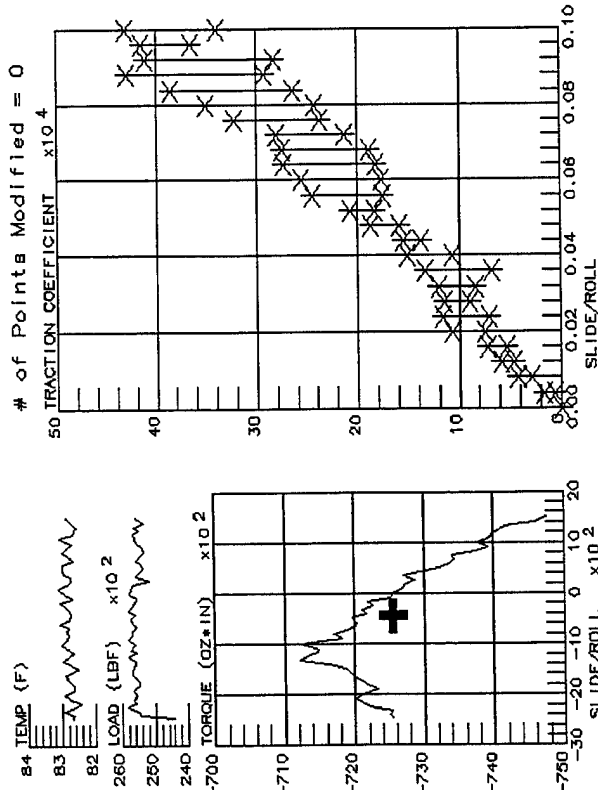
of Points Modified = 2



BC 89-126 Coray 100 used
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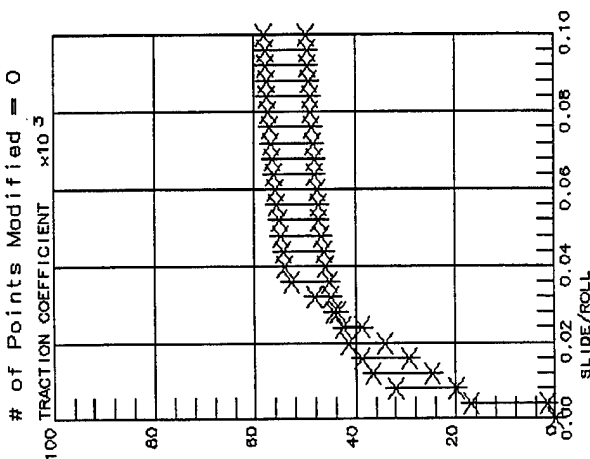
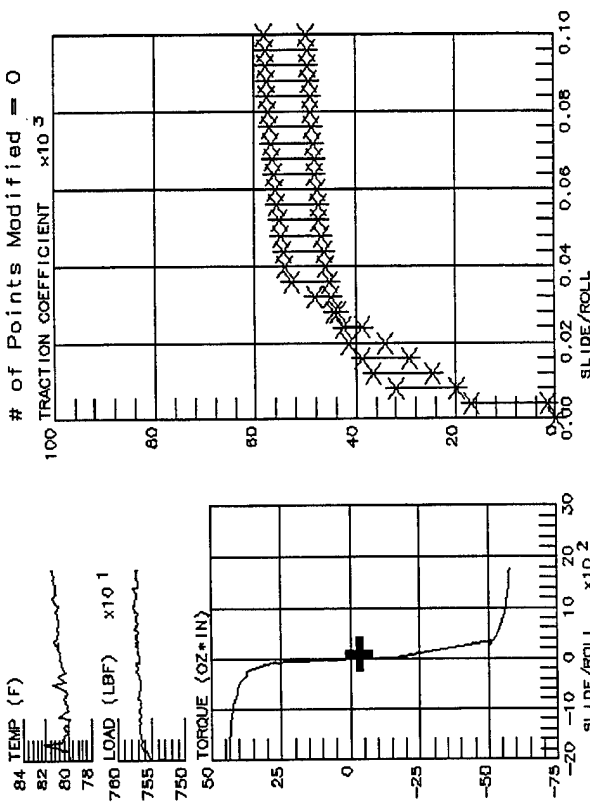
of Points Modified = 0



BC 89-126 Coray 100 used
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#6

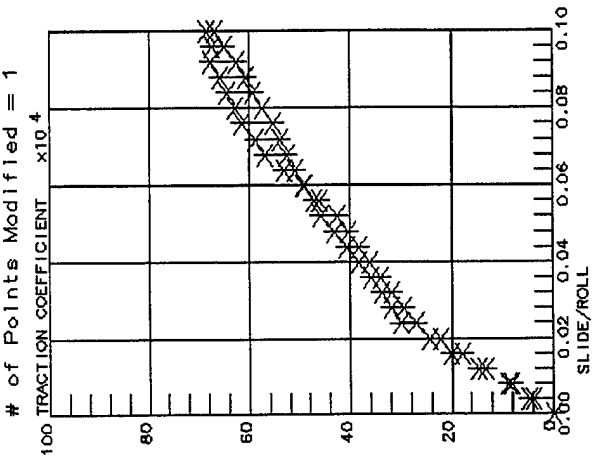
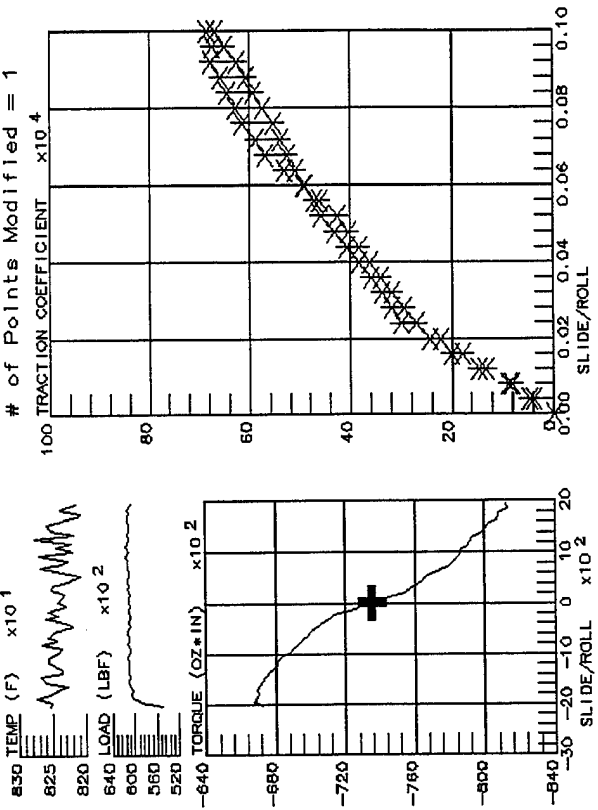
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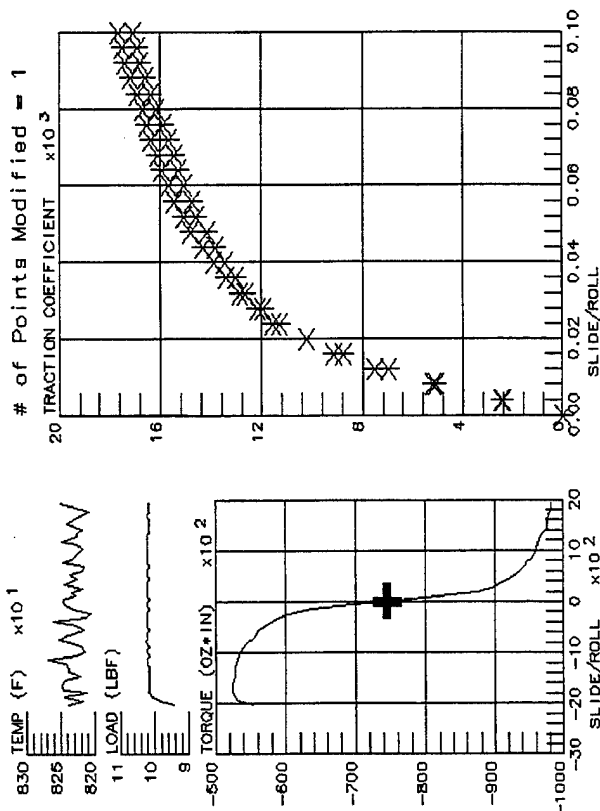
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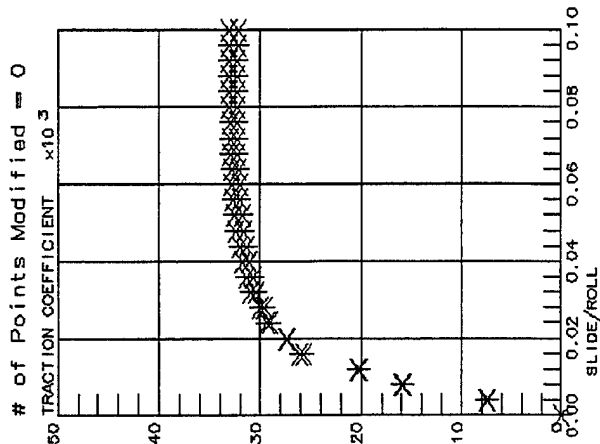
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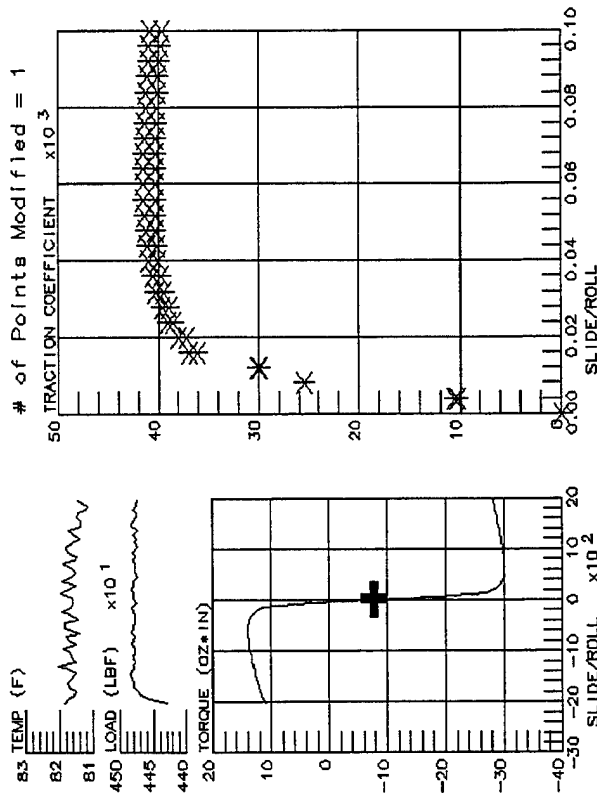
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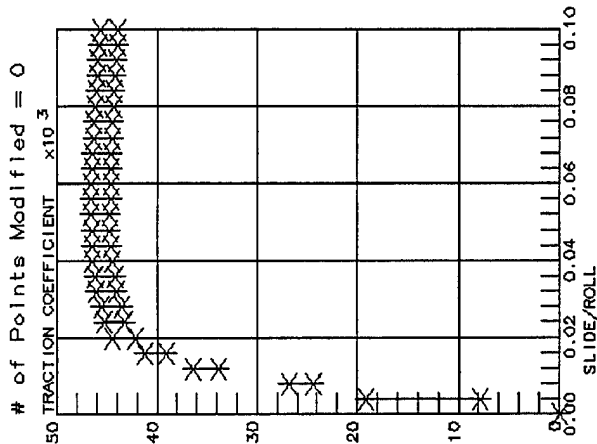
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#11

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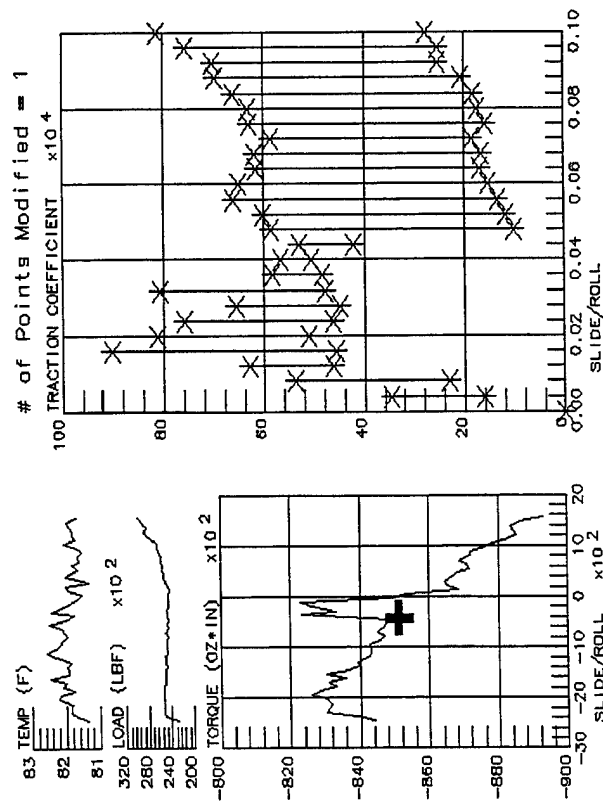
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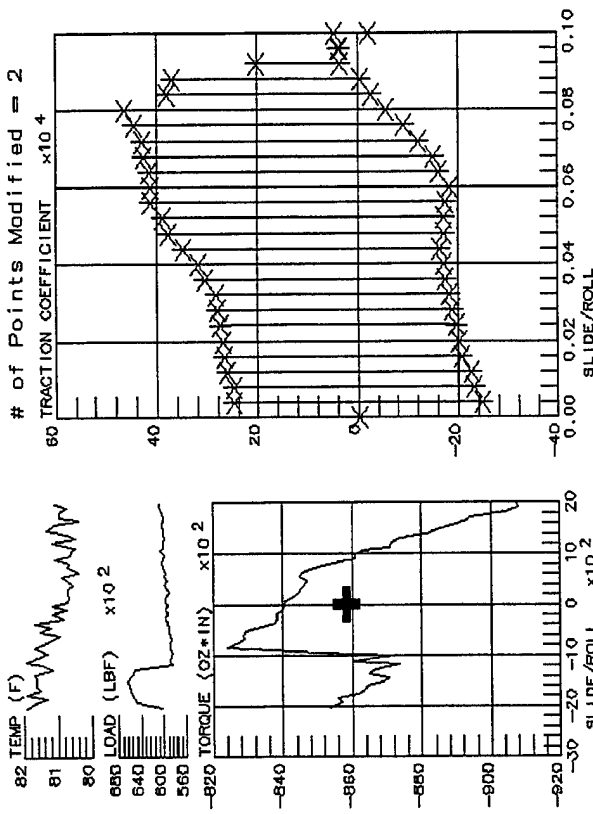
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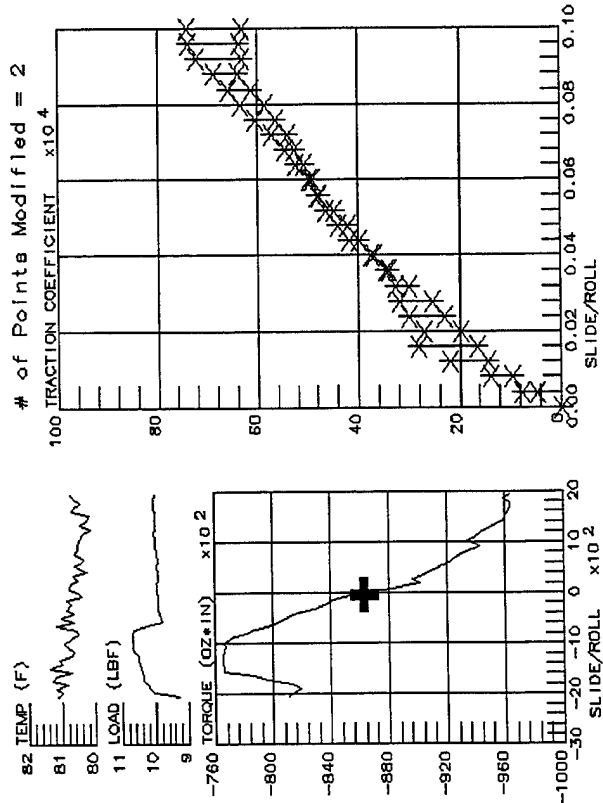
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BC 89-126 Coray 100 used
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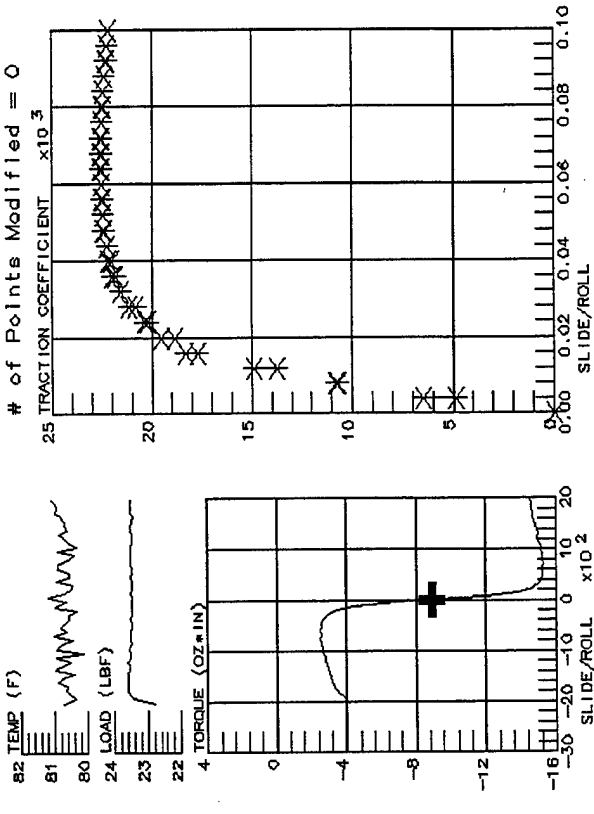
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BC 89-126 Coray 100 used
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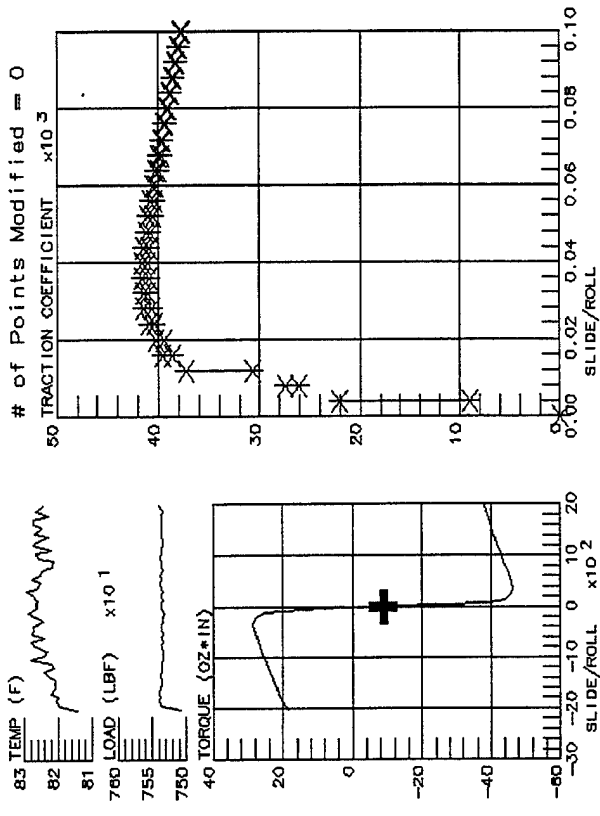
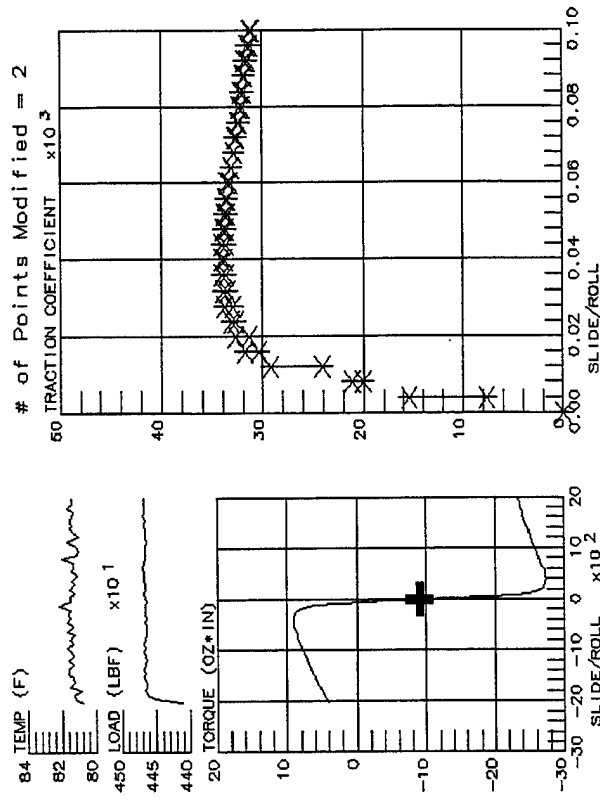
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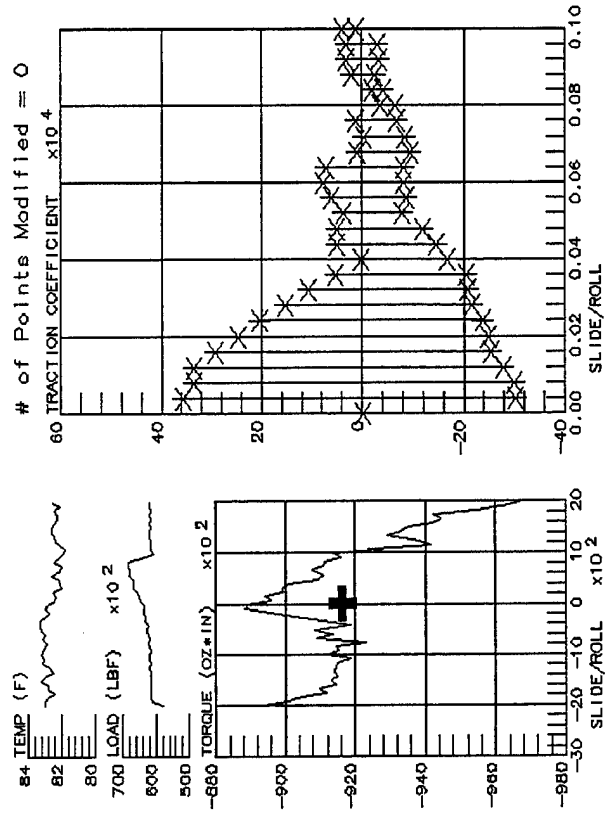
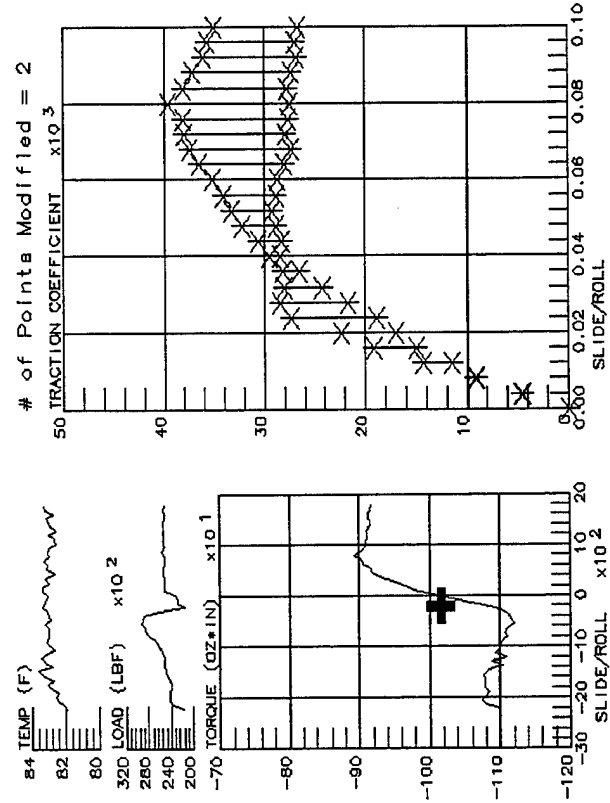
BC 89-126 Coray 100 used
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BC 89-126 Coray 100 used
75F 75LBF 2546RPM 6 FILE: bc75o



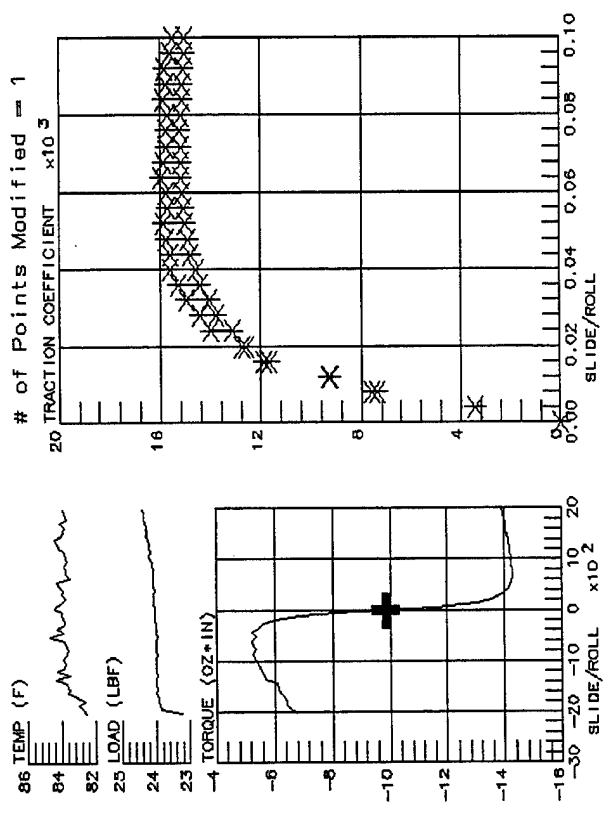
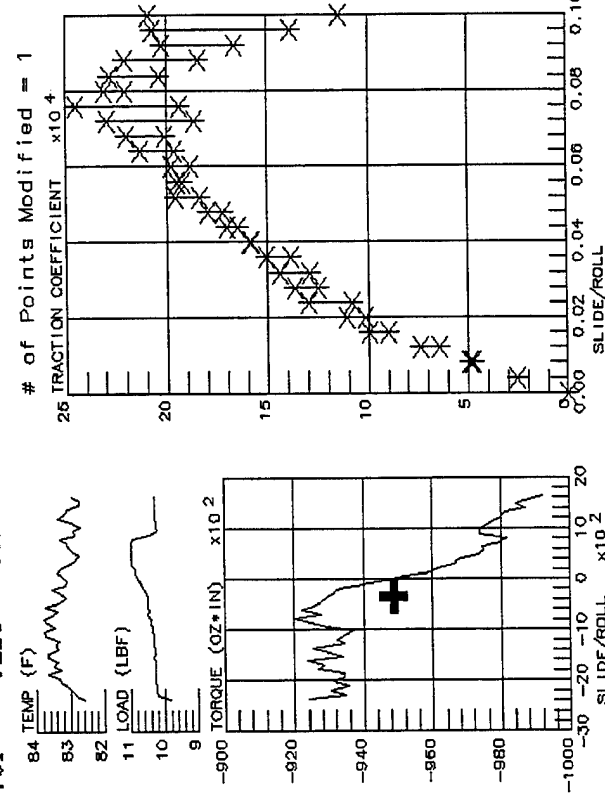
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BC 89-126 Coray 100 used
75F 5LBF 3820RPM 2 FILE: bc75d



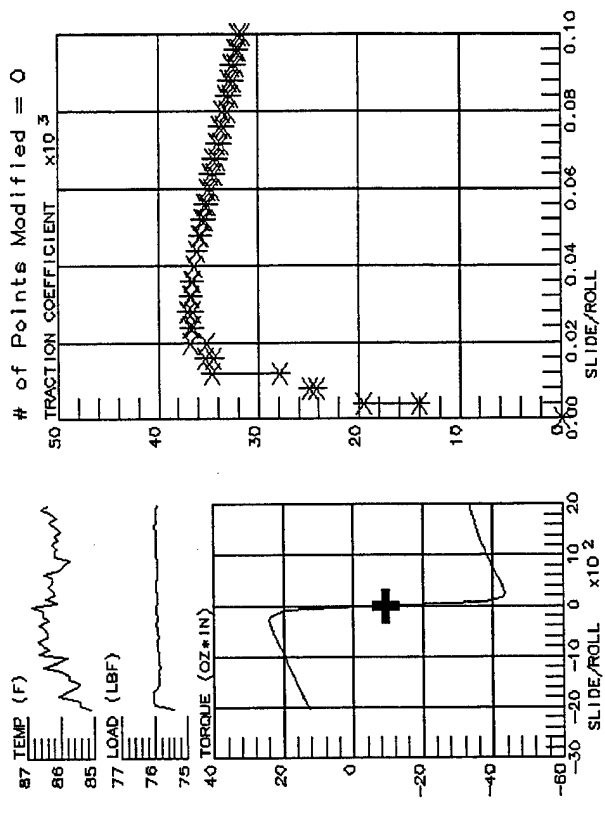
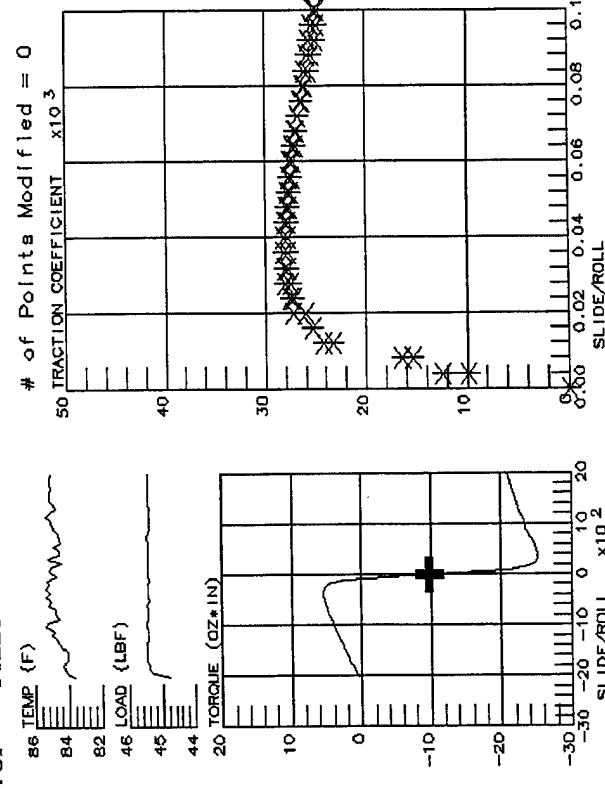
BC 89-126 Coray 100 used
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BC 89-126 Coray 100 used
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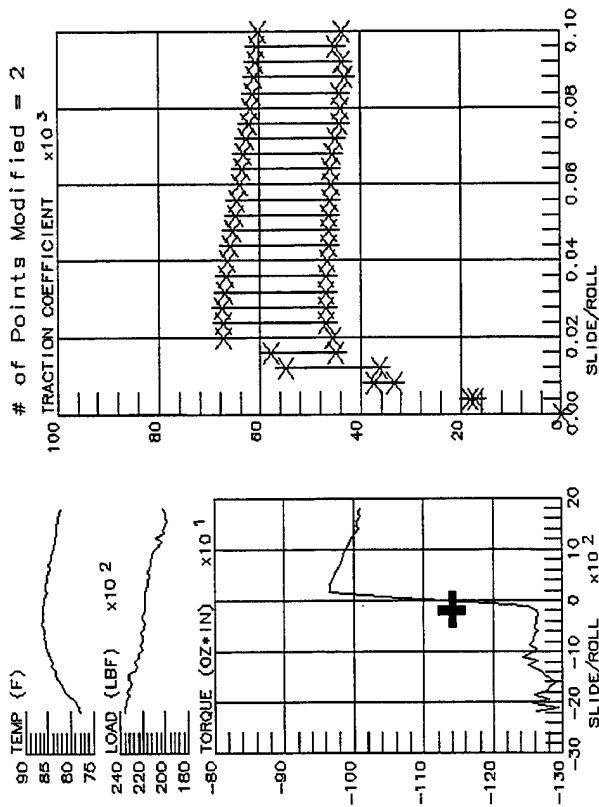


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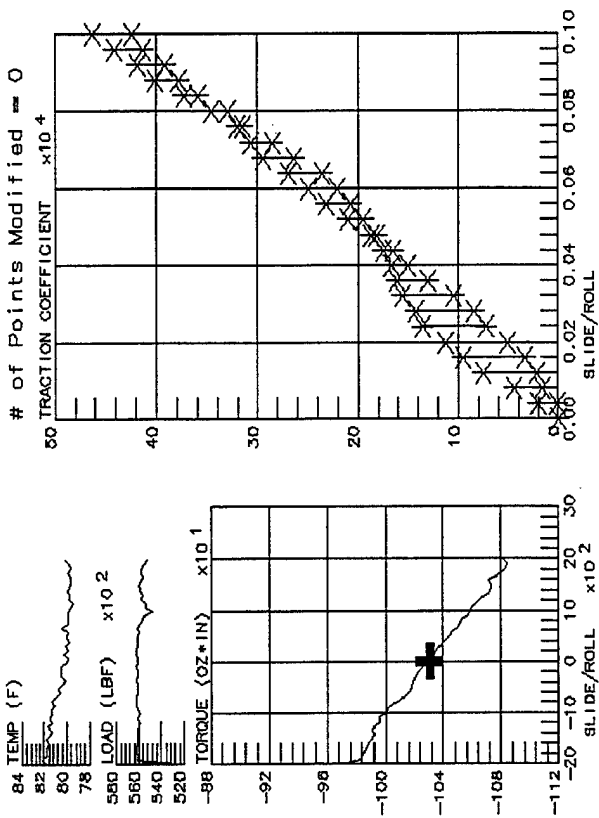
BC 89-126 Coray 100 used
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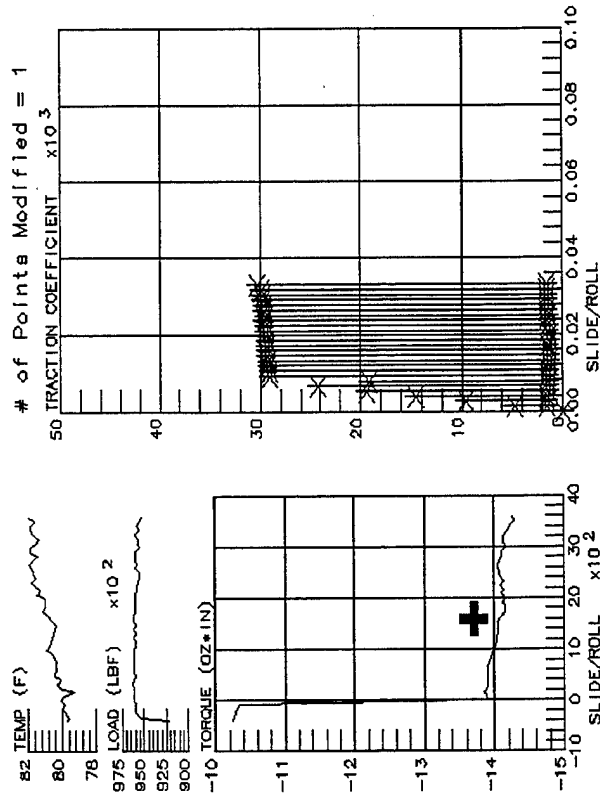
BC 89-126 Coray 100 used 1 FILE: bc75e #25
75F 1LBF 5093RPM



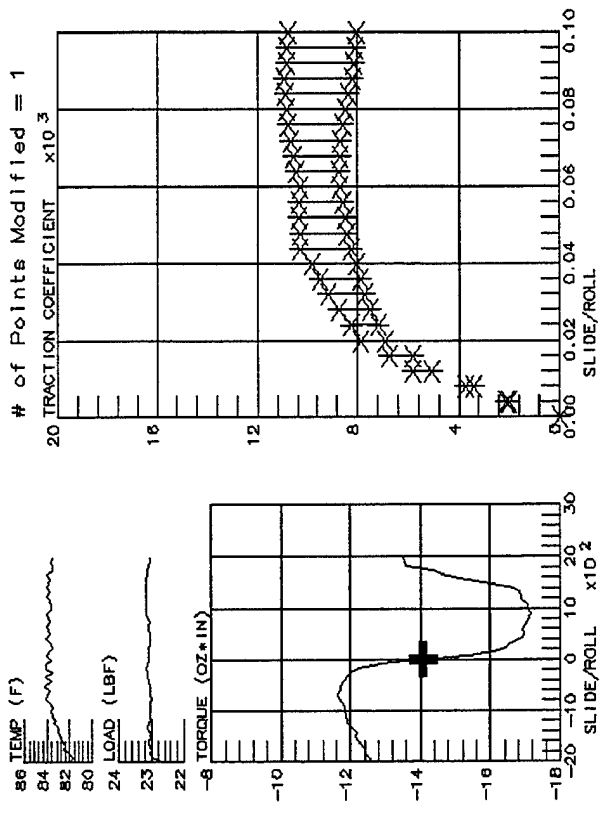
BC 89-126 Coray 100 used 2 FILE: bc75e #26
75F 5LBF 5093RPM



BC 89-126 Coray 100 used 3 FILE: bc75e #27
75F 9LBF 5093RPM



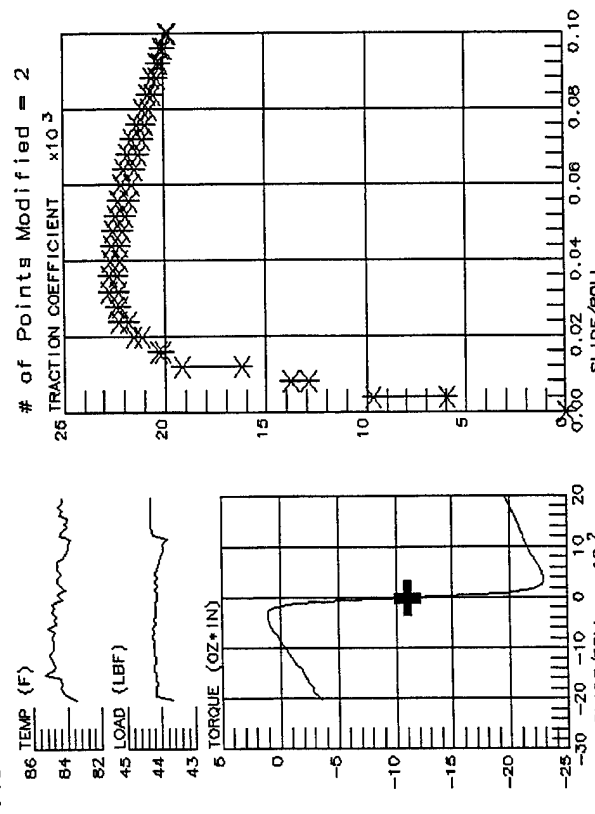
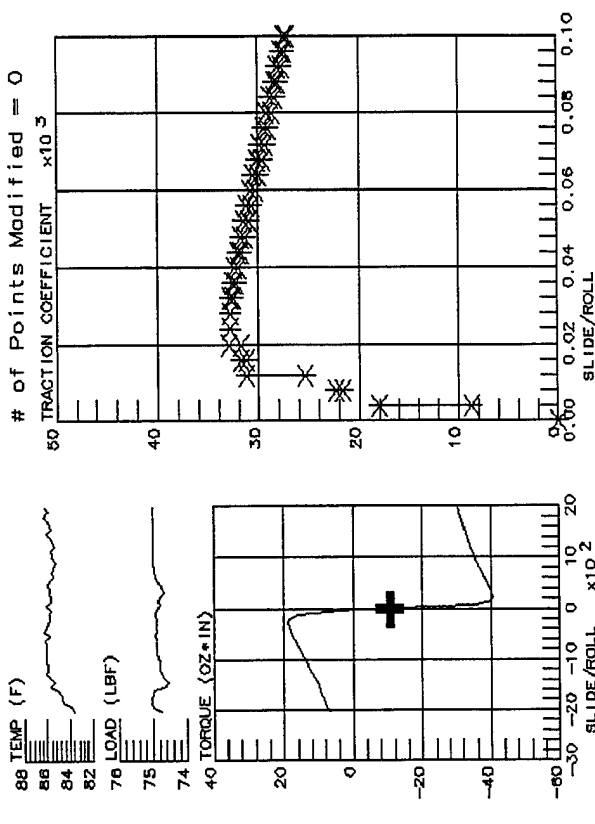
BC 89-126 Coray 100 used 4 FILE: bc75e #28
75F 23LBF 5093RPM



BC 89-126 Coray 100 used
75F 75LBF 5093RPM 6 FILE: bc75e

#29

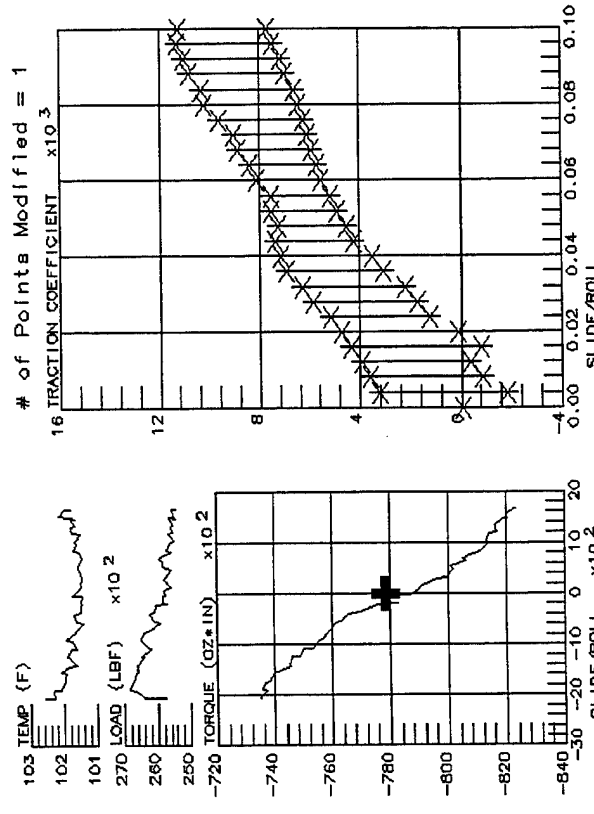
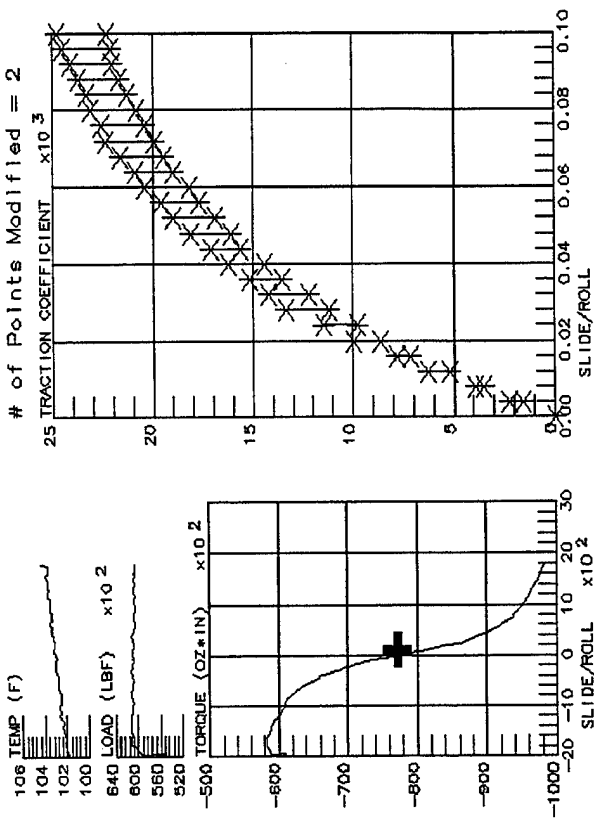
BC 89-126 Coray 100 used
75F 44LBF 5093RPM 5 FILE: bc75e



BC 89-126 Coray 100 used
100F 5LBF 283RPM 2 FILE: bc100a

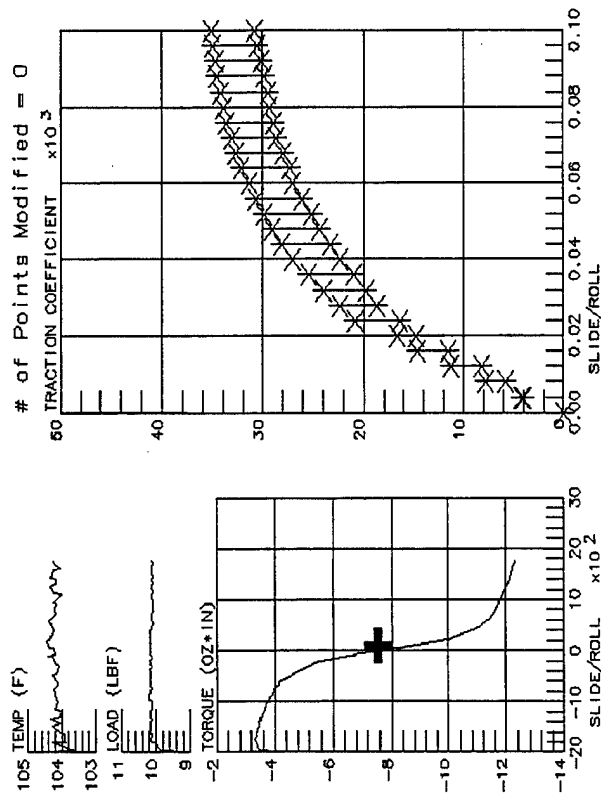
#32

BC 89-126 Coray 100 used
100F 11LBF 283RPM 1 FILE: bc100a



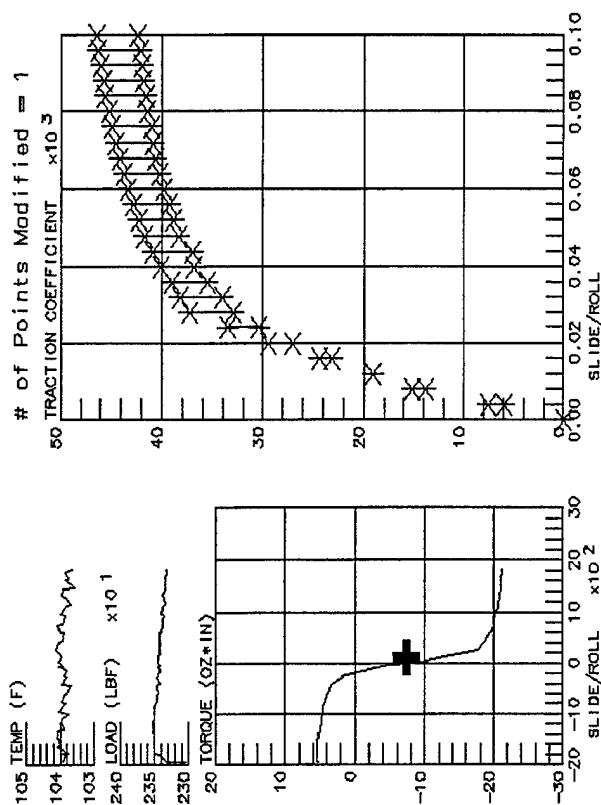
BC 89-126 Coray 100 used
100F 9LBF 283RPM 3 FILE: bc100a

#33
of Points Modified = 0



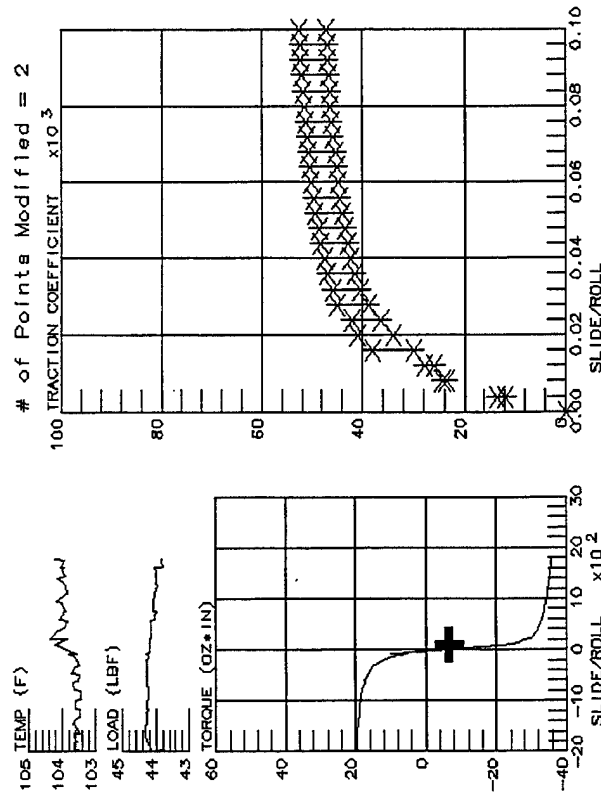
BC 89-126 Coray 100 used
100F 23LBF 283RPM 4 FILE: bc100a

#34
of Points Modified = 1



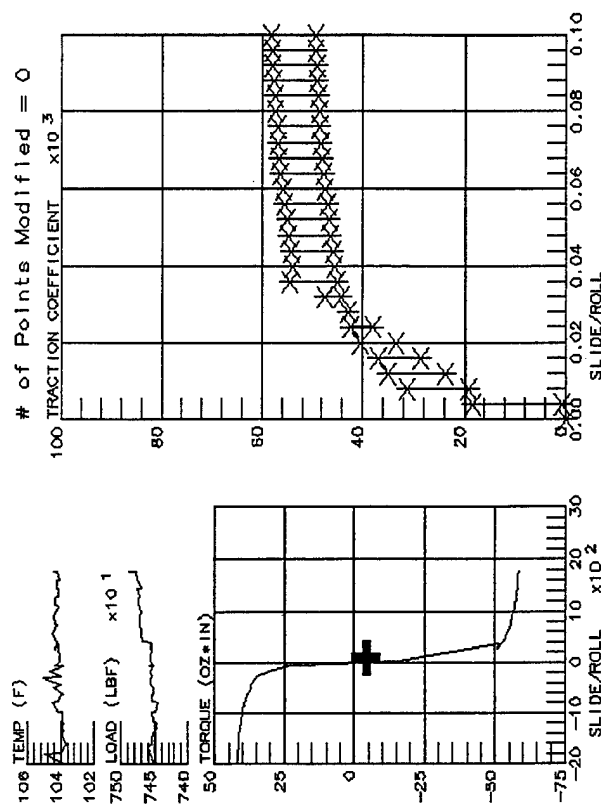
BC 89-126 Coray 100 used
100F 44LBF 283RPM 5 FILE: bc100a

#35
of Points Modified = 2



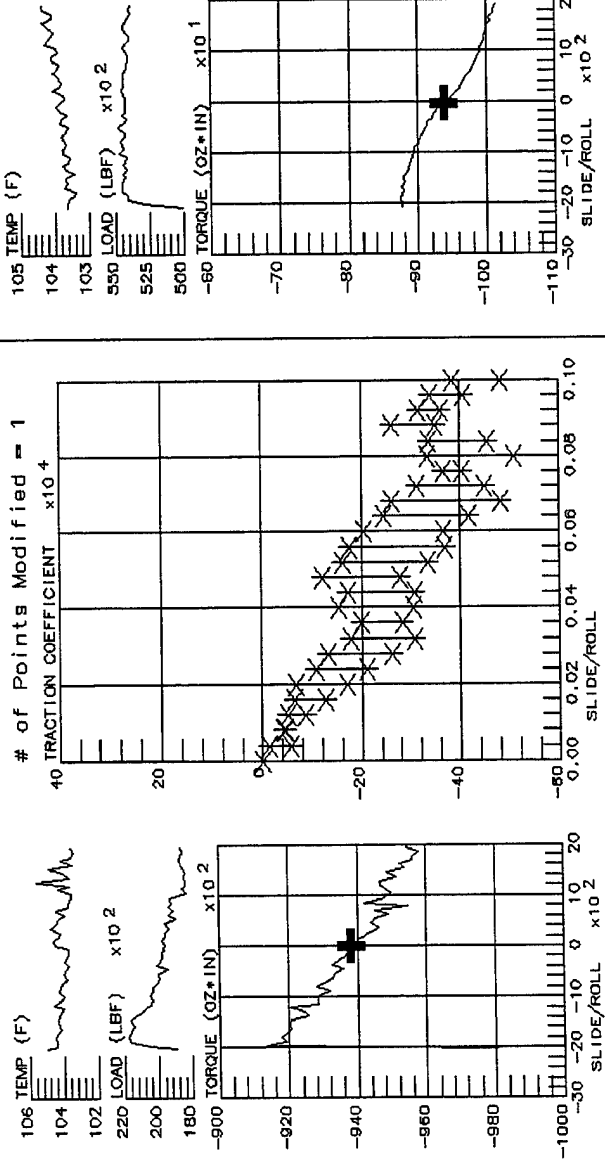
BC 89-126 Coray 100 used
100F 75LBF 283RPM 6 FILE: bc100a

#36
of Points Modified = 0



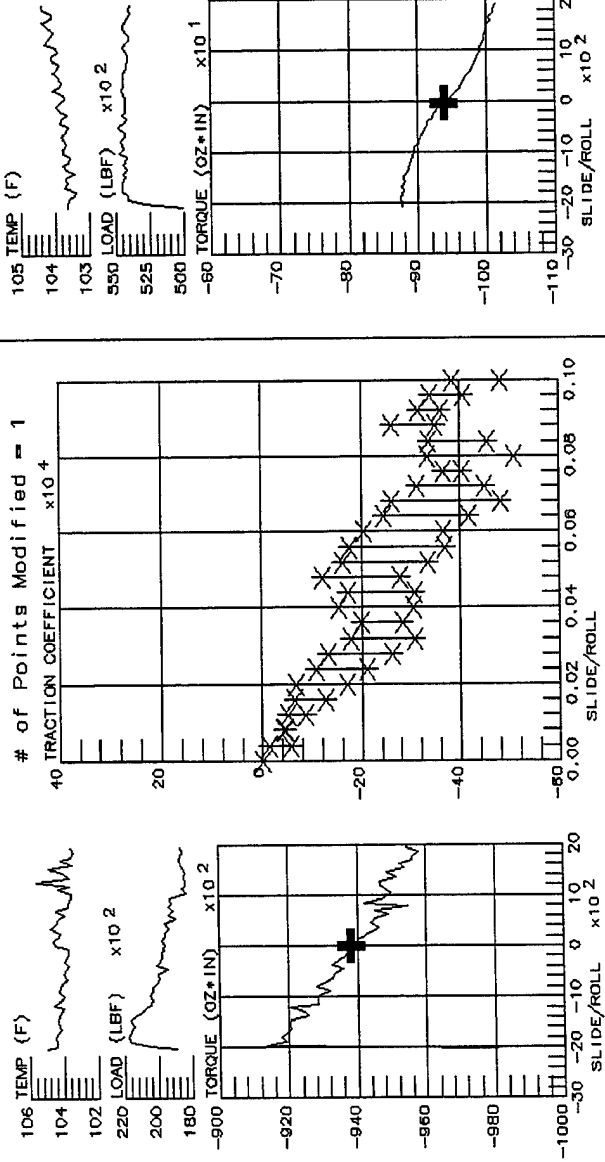
BC 89-126 Coray 100 used
100F 1LBF 1273RPM 1 FILE: bc100b

of Points Modified = 1



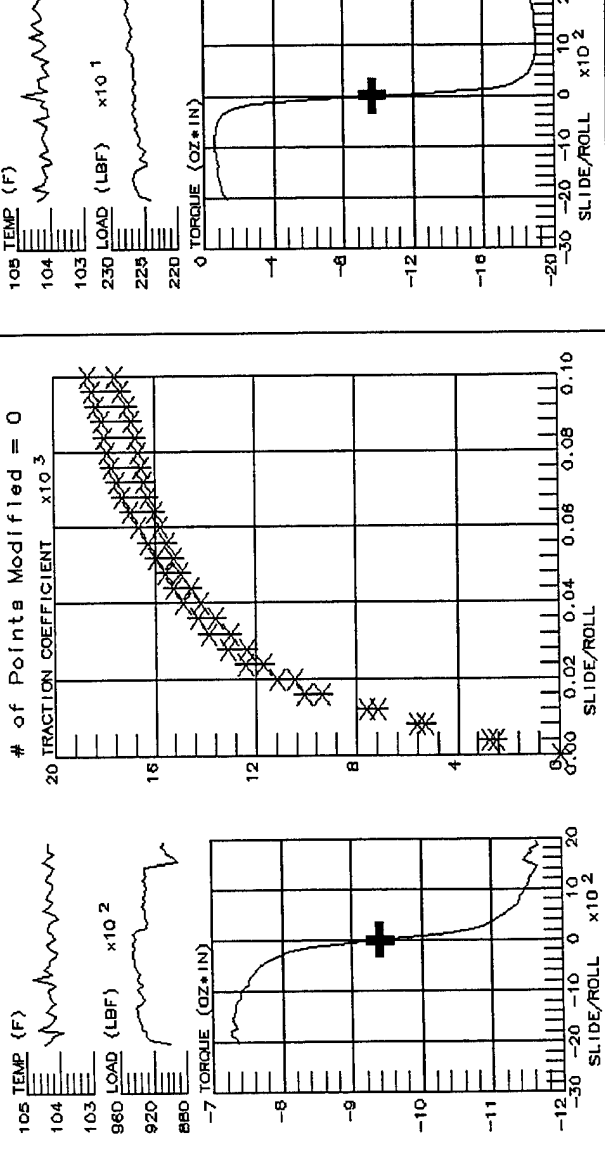
BC 89-126 Coray 100 used
100F 5LBF 1273RPM 2 FILE: bc100b

of Points Modified = 2



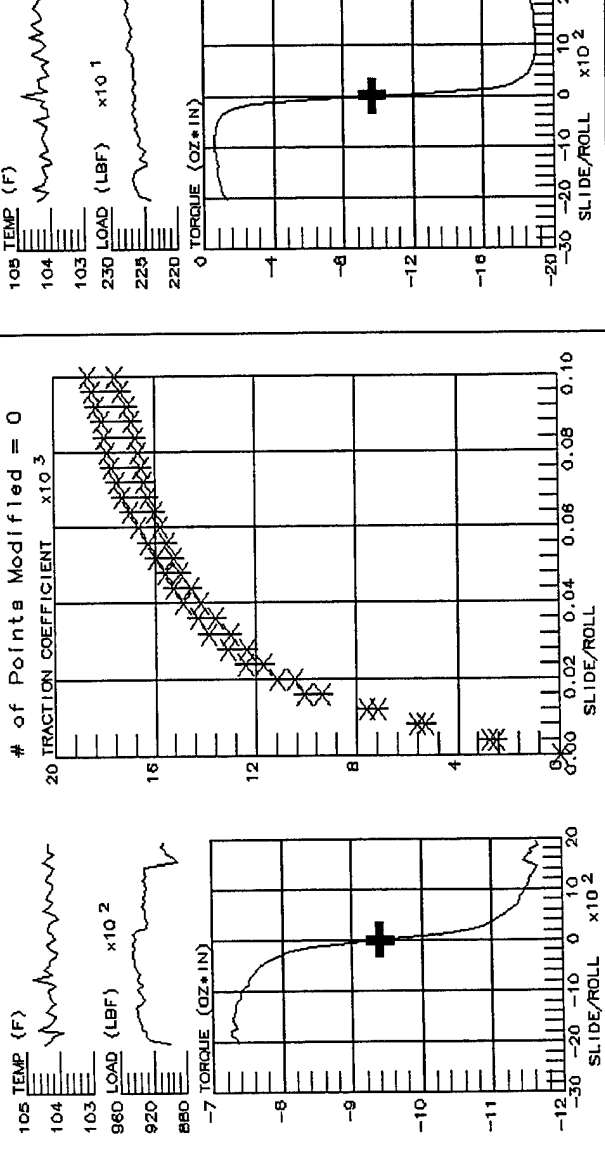
BC 89-126 Coray 100 used
100F 9LBF 1273RPM 3 FILE: bc100b

of Points Modified = 0



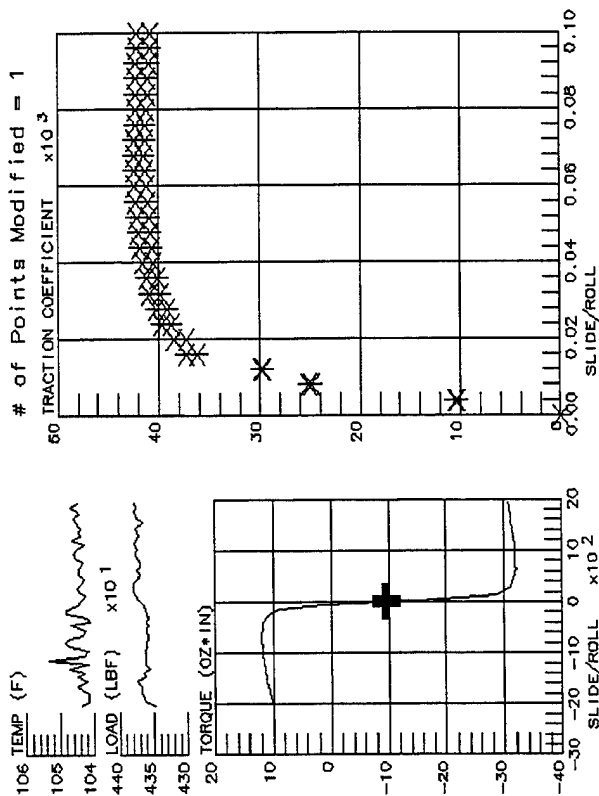
BC 89-126 Coray 100 used
100F 23LBF 1273RPM 4 FILE: bc100b

of Points Modified = 0



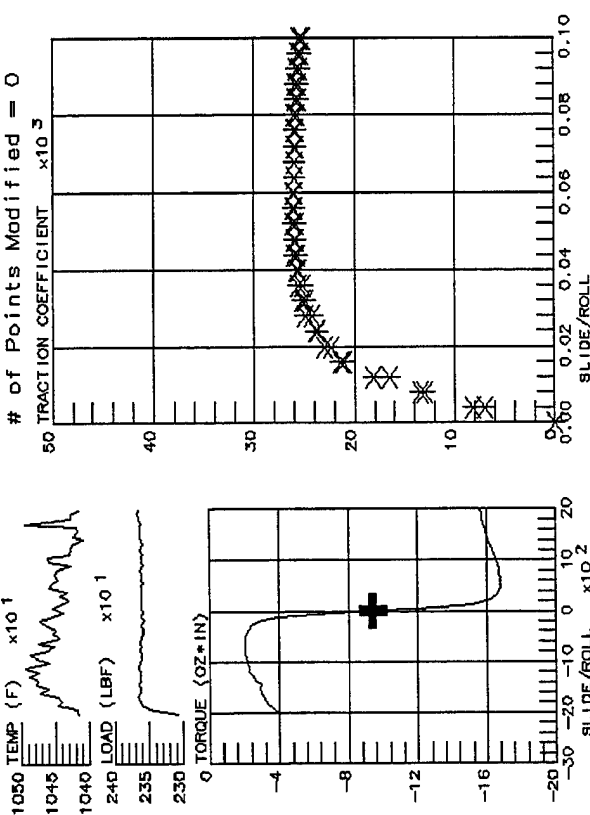
BC 89-126 Coray 100 used
100F 44LBF 1273RPM 5 FILE: bc100b

#41



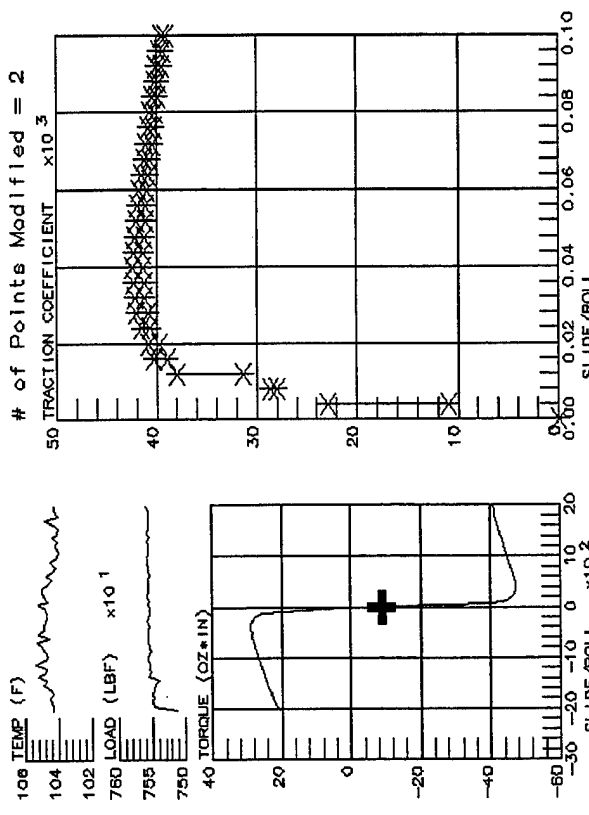
BC 89-126 Coray 100 used
100F 9LBF 2546RPM 3 FILE: bc100c

#45
of Points Modified = 0



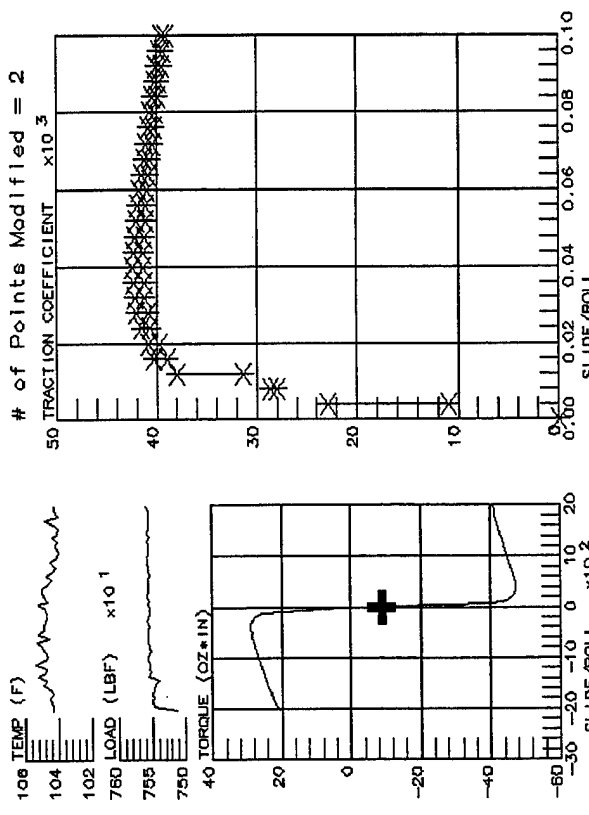
BC 89-126 Coray 100 used
100F 75LBF 2546RPM 6 FILE: bc100c

#47
of Points Modified = 0



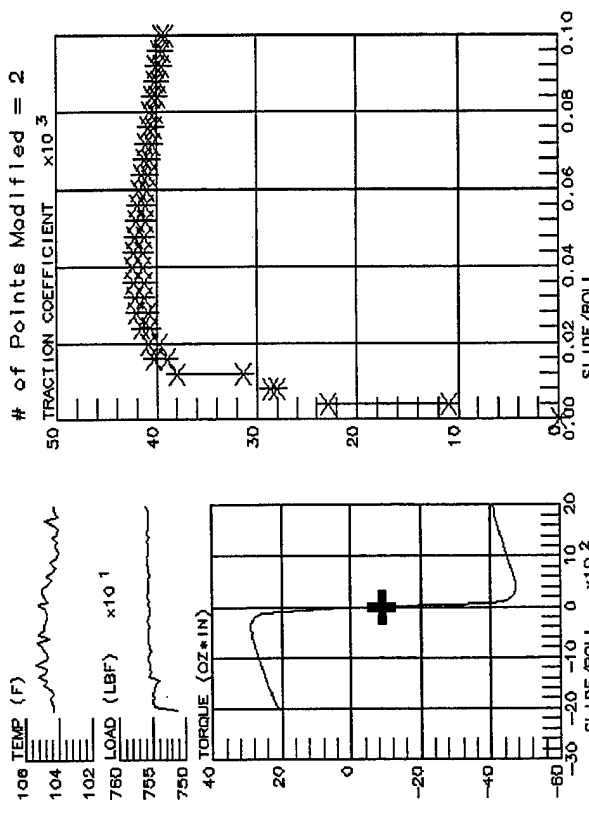
BC 89-126 Coray 100 used
100F 9LBF 2546RPM 3 FILE: bc100c

#46
of Points Modified = 0



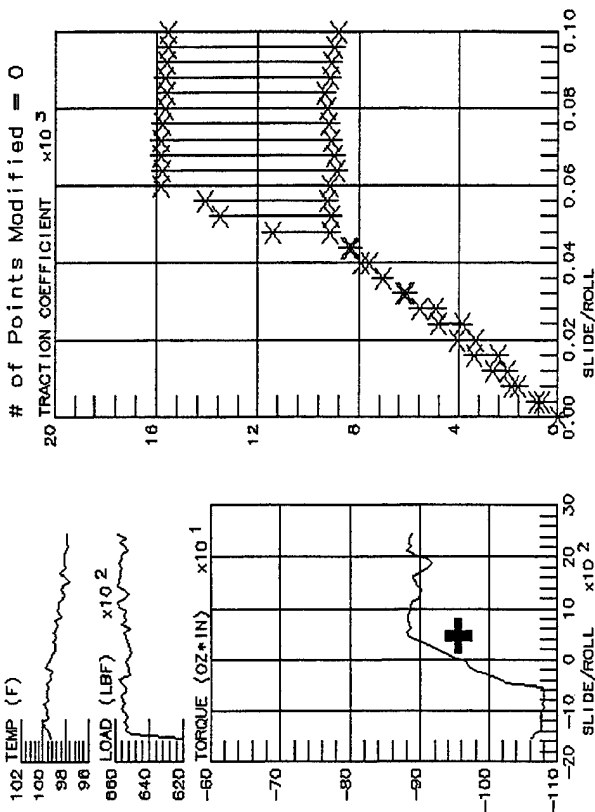
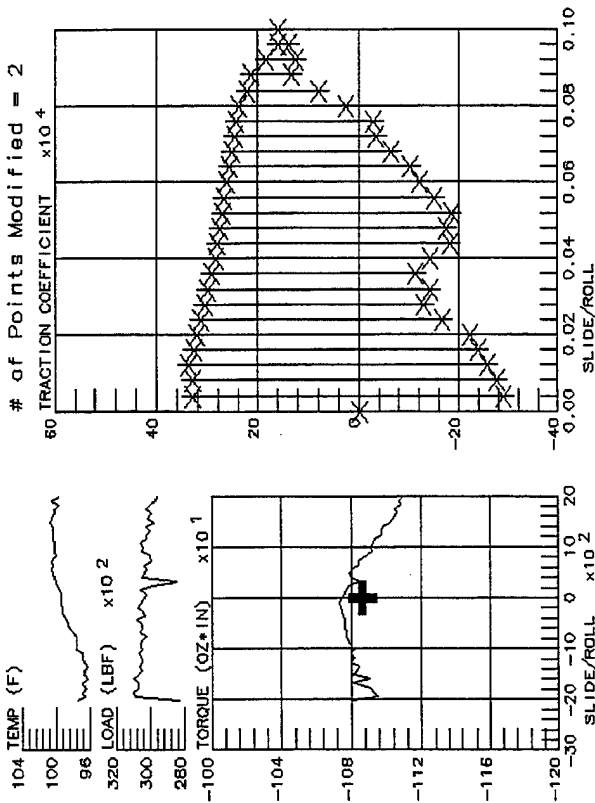
BC 89-126 Coray 100 used
100F 75LBF 2546RPM 6 FILE: bc100c

#48
of Points Modified = 2



BC 89-126 Coray 100 used
100F 11BF 3820RPM 1 FILE: bc100d

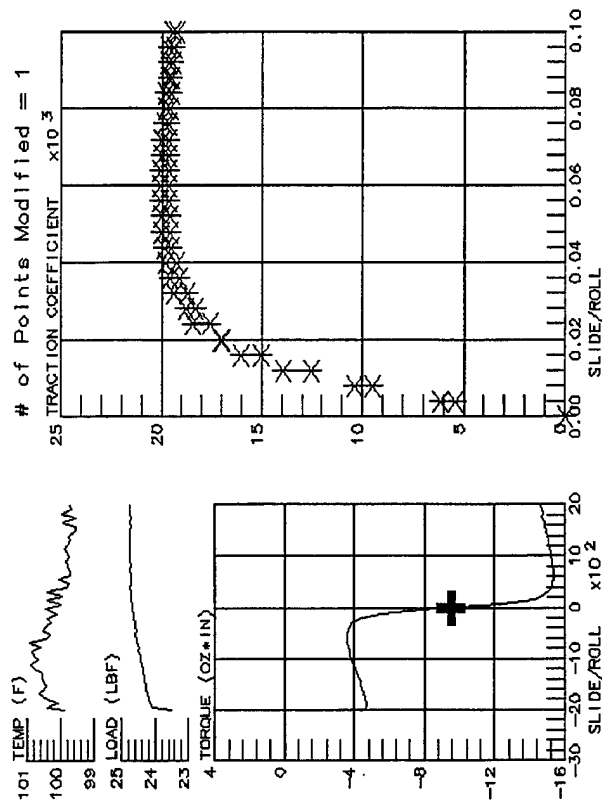
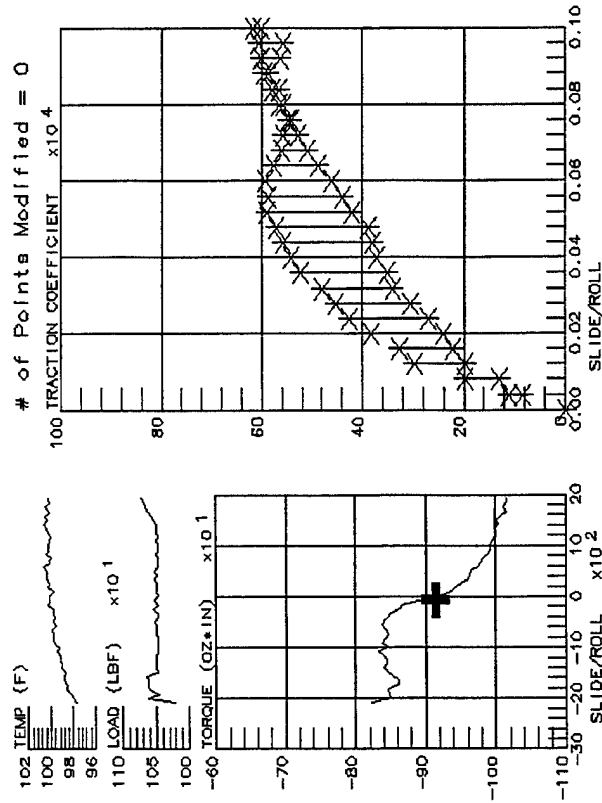
#49
of Points Modified = 2



#50
of Points Modified = 0

BC 89-126 Coray 100 used
100F 9LBF 3820RPM 3 FILE: bc100d

#51
of Points Modified = 0

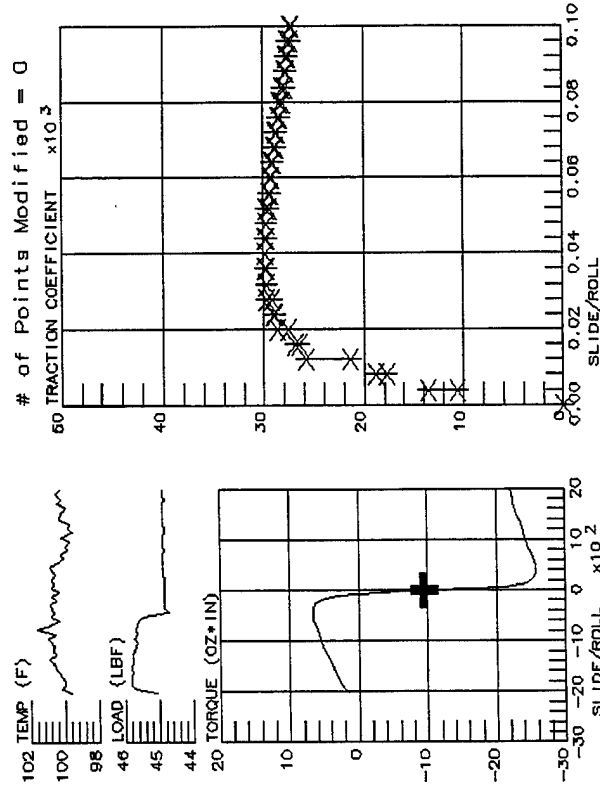


#52
of Points Modified = 1

BC 89-126 Coray 100 used
100F 44LBF 3820RPM 5 FILE: bc100d

#53

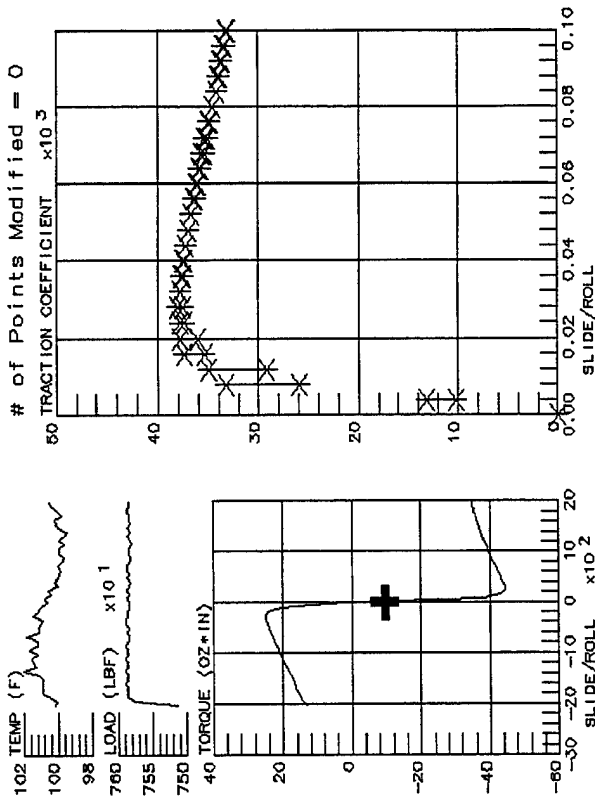
of Points Modified = 0



#54

BC 89-126 Coray 100 used
100F 75LBF 3820RPM 6 FILE: bc100d

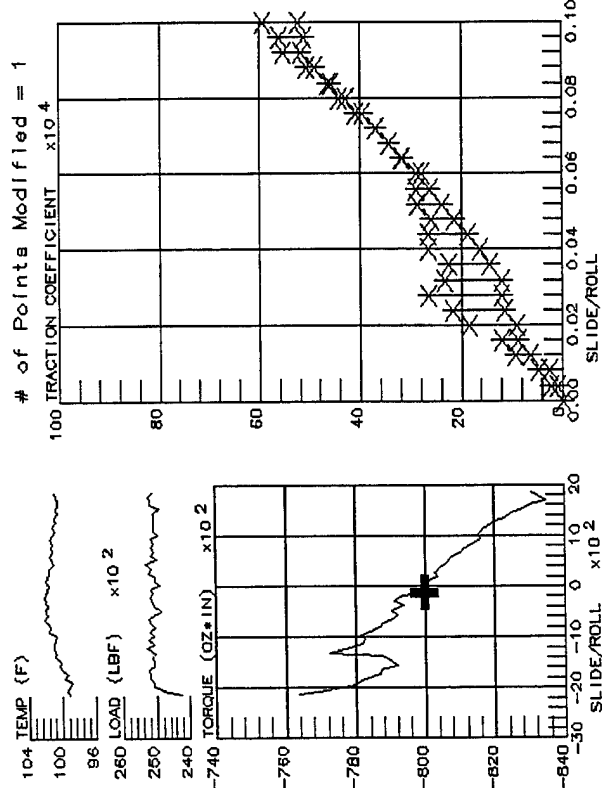
of Points Modified = 0



BC 89-126 Coray 100 used
100F 11LBF 5093RPM 1 FILE: bc100e

#55

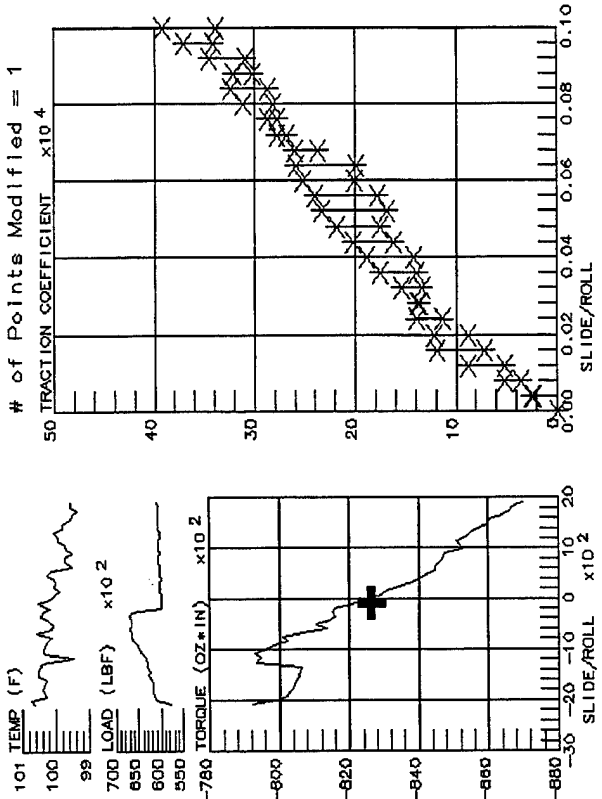
of Points Modified = 1



#56

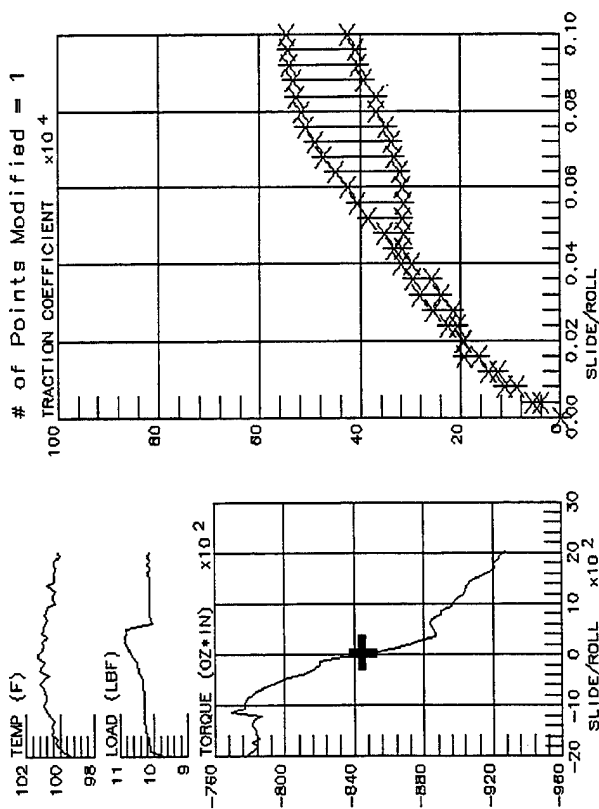
BC 89-126 Coray 100 used
100F 5LBF 5093RPM 2 FILE: bc100e

of Points Modified = 1



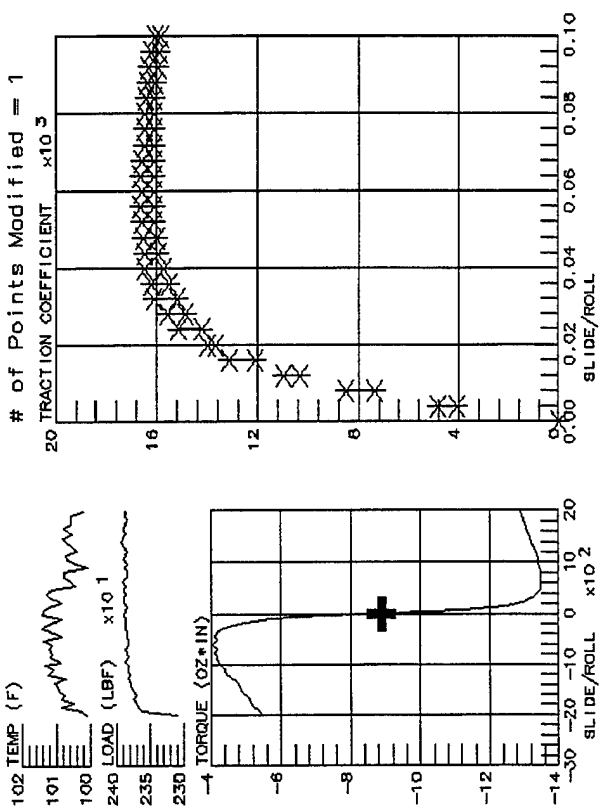
BC 89-126 Coray 100 used
100F 9LBF 5093RPM 3 FILE: bc100e

#57



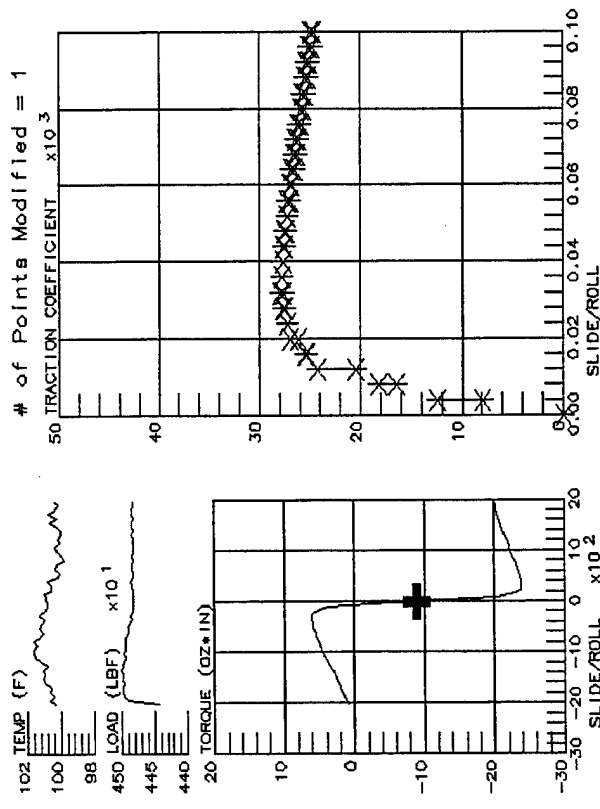
BC 89-126 Coray 100 used
100F 23LBF 5093RPM 4 FILE: bc100e

#58



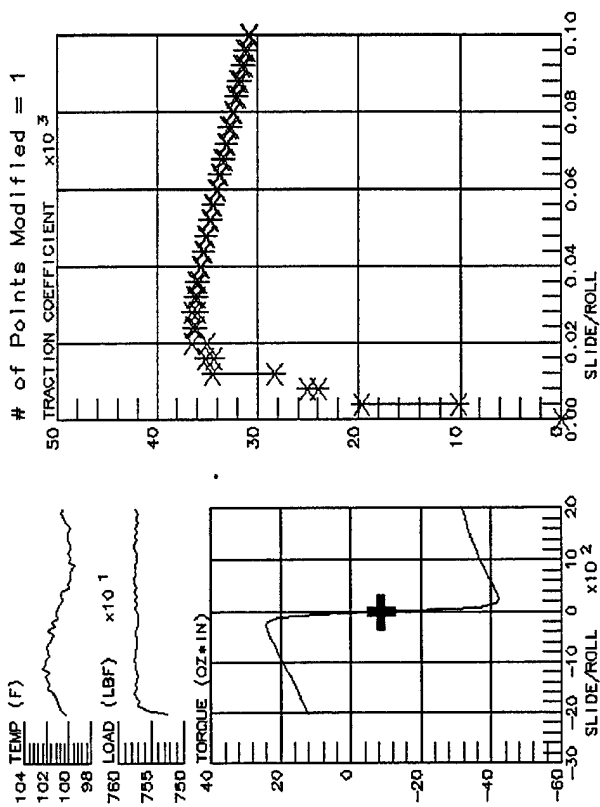
BC 89-126 Coray 100 used
100F 44LBF 5093RPM 5 FILE: bc100e

#59



BC 89-126 Coray 100 used
100F 75LBF 5093RPM 6 FILE: bc100e

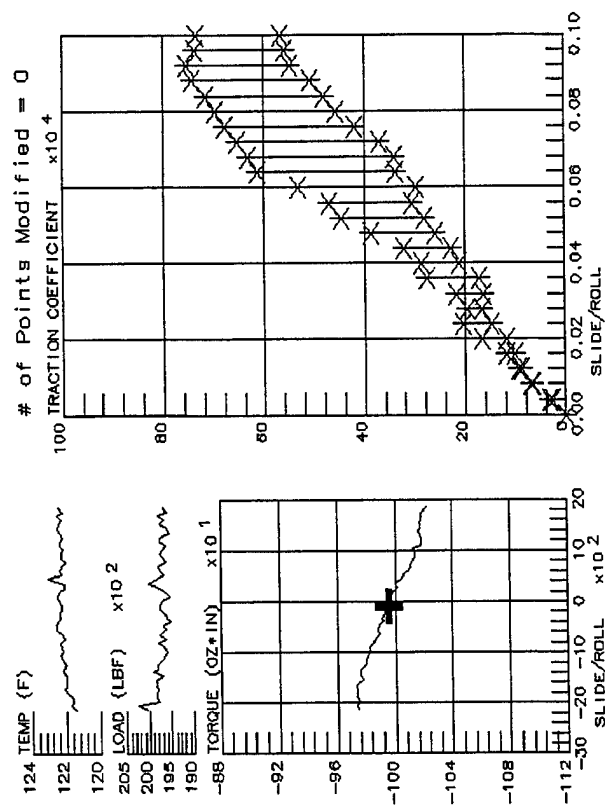
#80



BC 89-126 Coray 100 used
120F 11BF 1273RPM 1 FILE: bc120b

#61

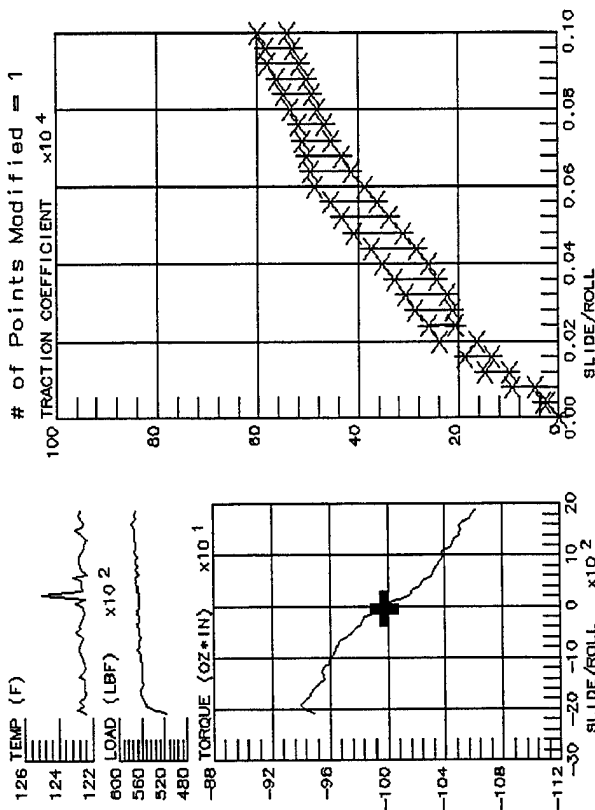
of Points Modified = 0



BC 89-126 Coray 100 used
120F 5LBF 1273RPM 2 FILE: bc120b

#62

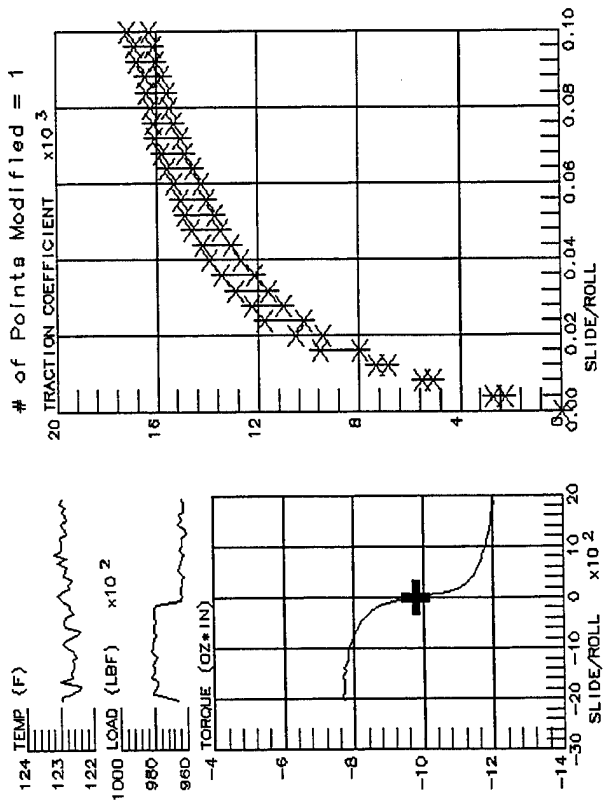
of Points Modified = 1



BC 89-126 Coray 100 used
120F 9LBF 1273RPM 3 FILE: bc120b

#63

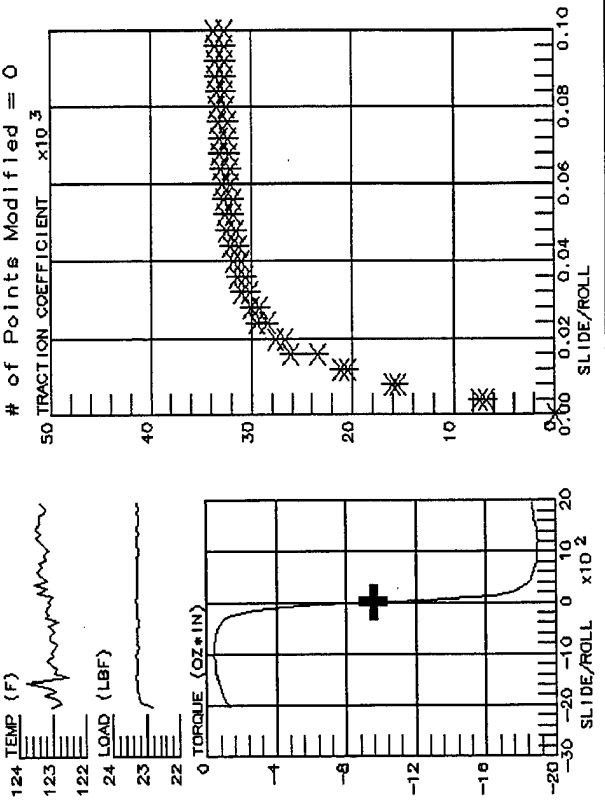
of Points Modified = 1



BC 89-126 Coray 100 used
120F 23LBF 1273RPM 4 FILE: bc120b

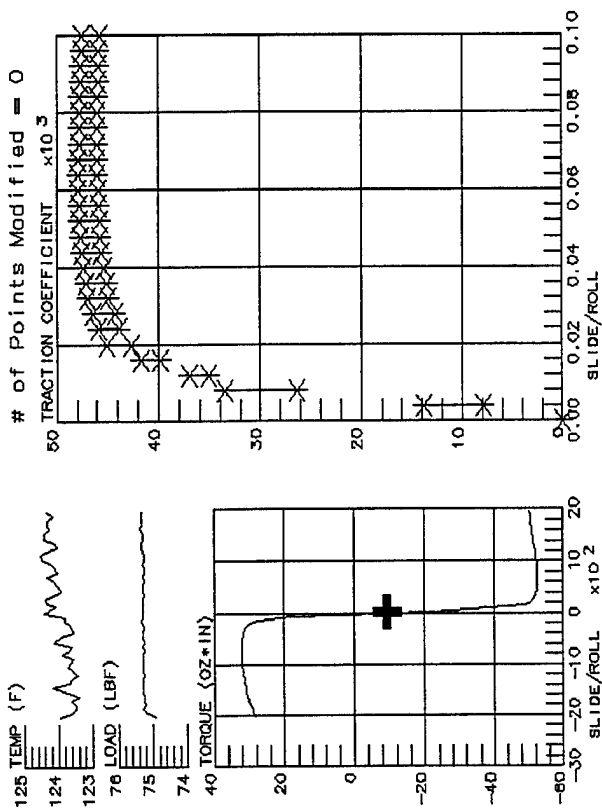
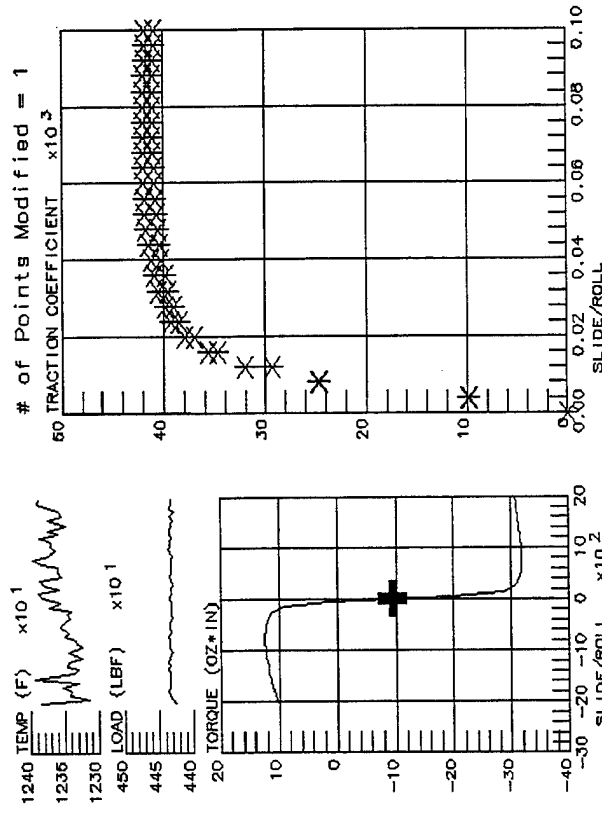
#64

of Points Modified = 0



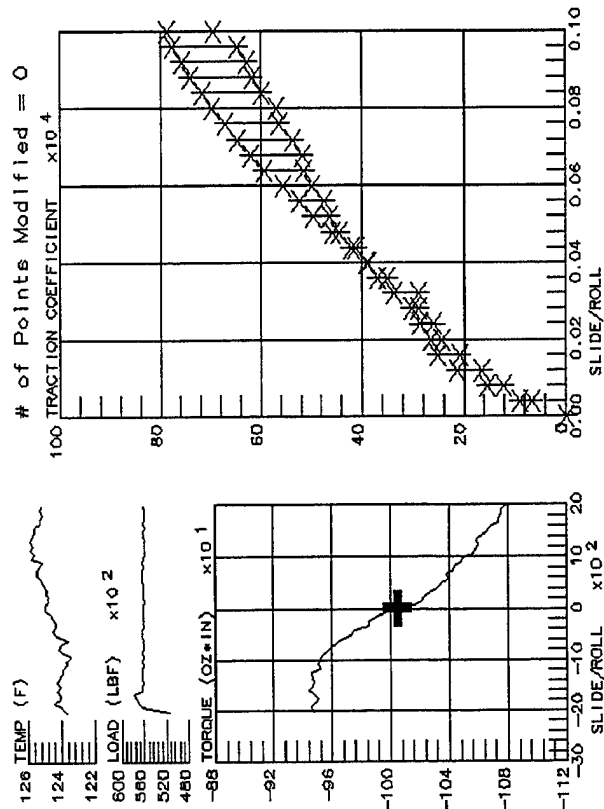
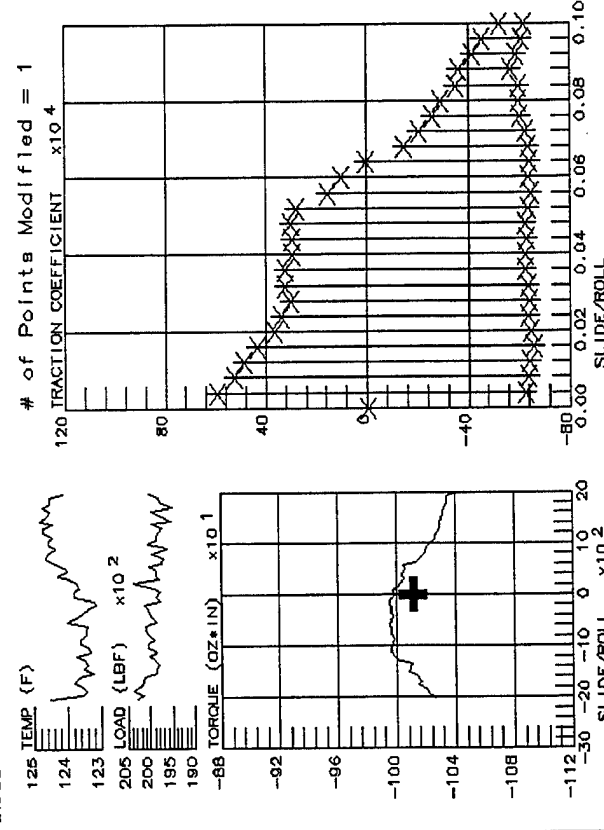
BC 89-126 Coray 100 used
120F 44LBF 1273RPM 5 FILE: bc120b

#65
#66
BC 89-126 Coray 100 used
120F 75LBF 1273RPM 6 FILE: bc120b



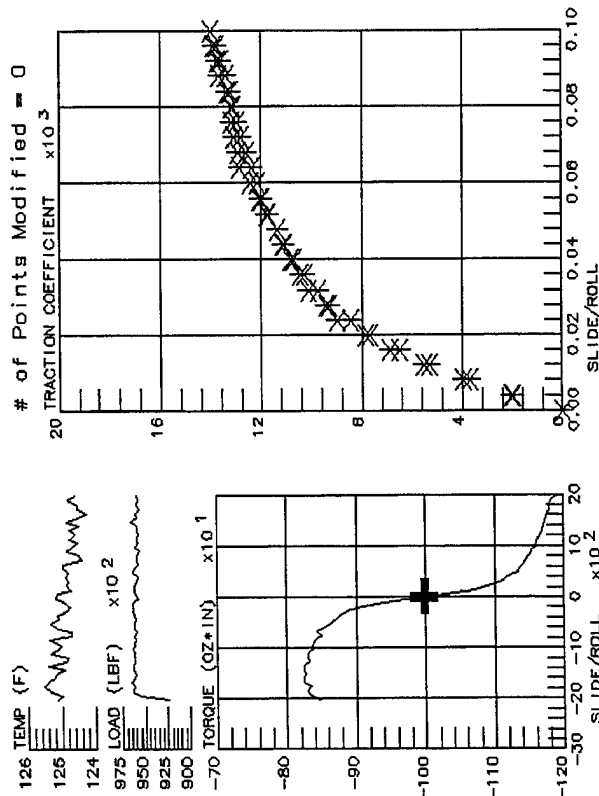
BC 89-126 Coray 100 used
120F 1LBF 2546RPM 1 FILE: bc120c

#67
#68
BC 89-126 Coray 100 used
120F 5LBF 2546RPM 2 FILE: bc120c



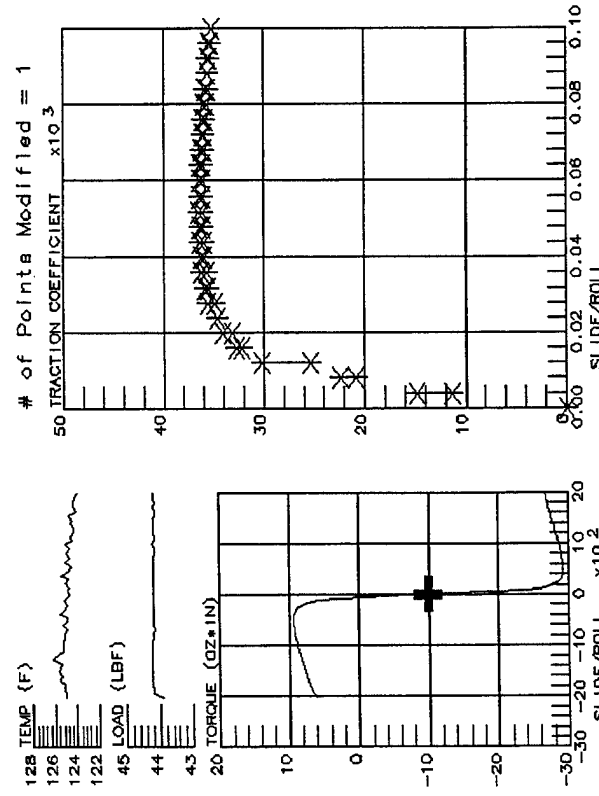
BC 89-126 Coray 100 used
120F 9LBF 2546RPM 3 FILE: bc120c

#69
of Points Modified = 0



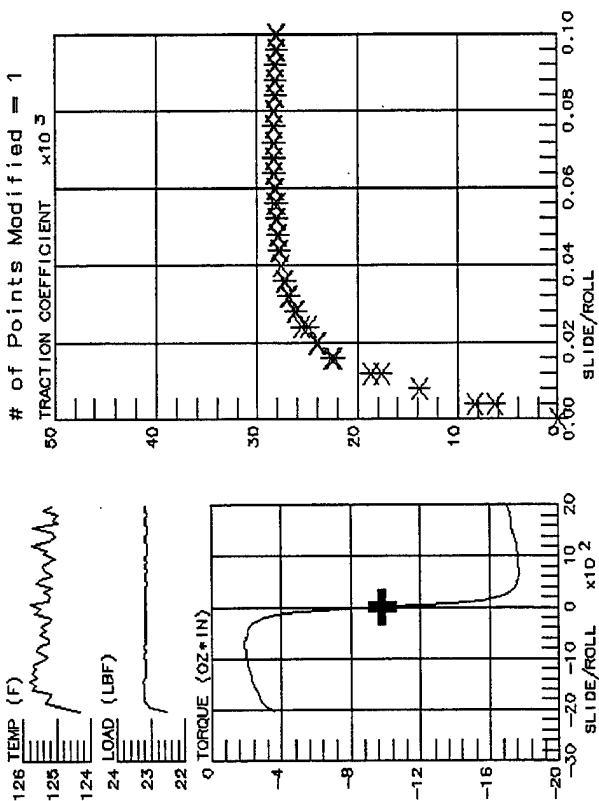
BC 89-126 Coray 100 used
120F 44LBF 2546RPM 5 FILE: bc120c

#71
of Points Modified = 1



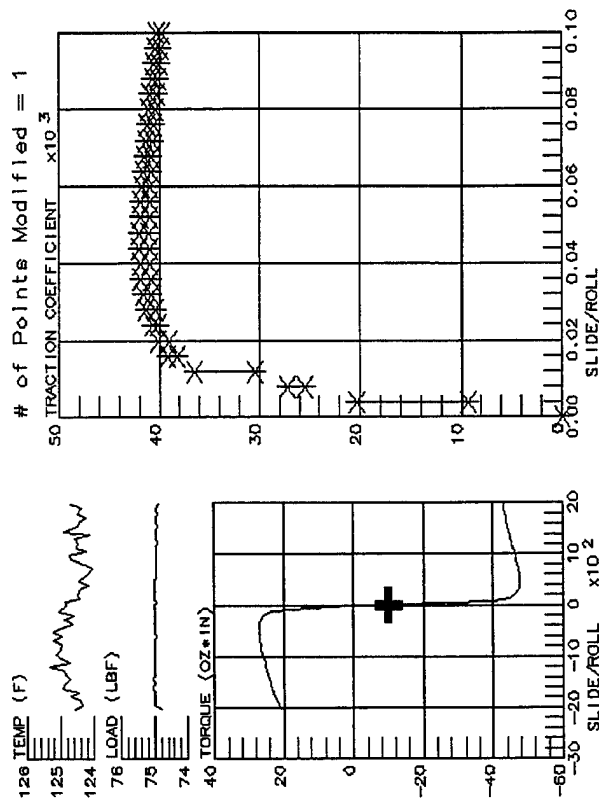
BC 89-126 Coray 100 used
120F 23LBF 2546RPM 4 FILE: bc120c

#70



BC 89-126 Coray 100 used
120F 75LBF 2546RPM 6 FILE: bc120c

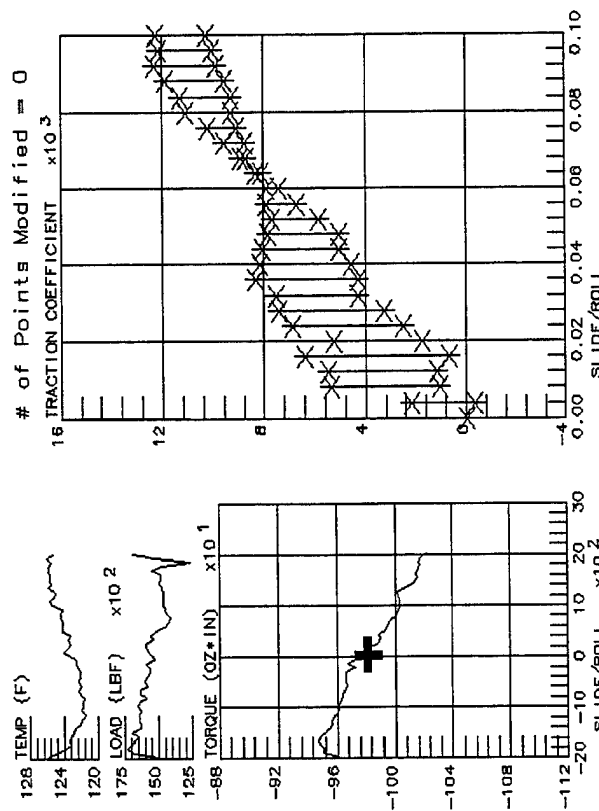
#72



TRACTION MODE LOGS

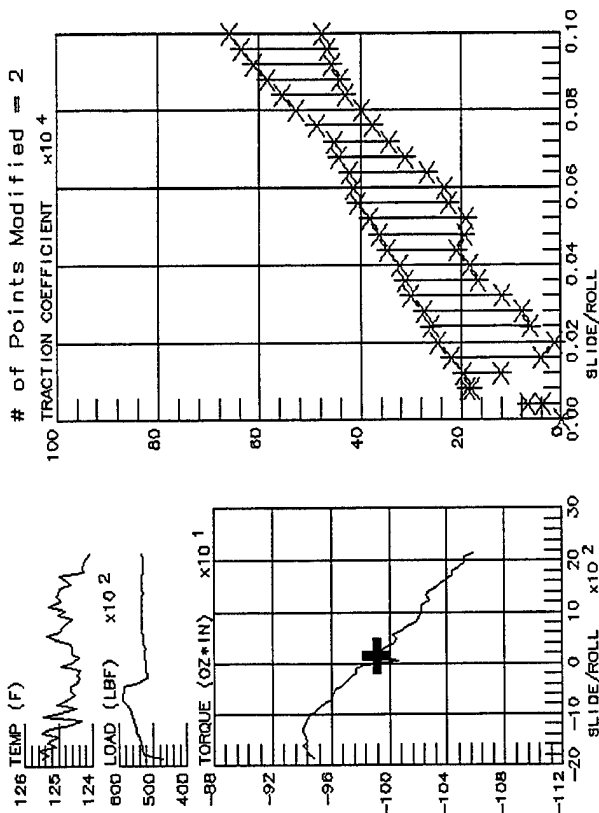
BC 89-126 Coray 100 used
120F 1LBF 3620RPM 1 FILE: bc120d

#73



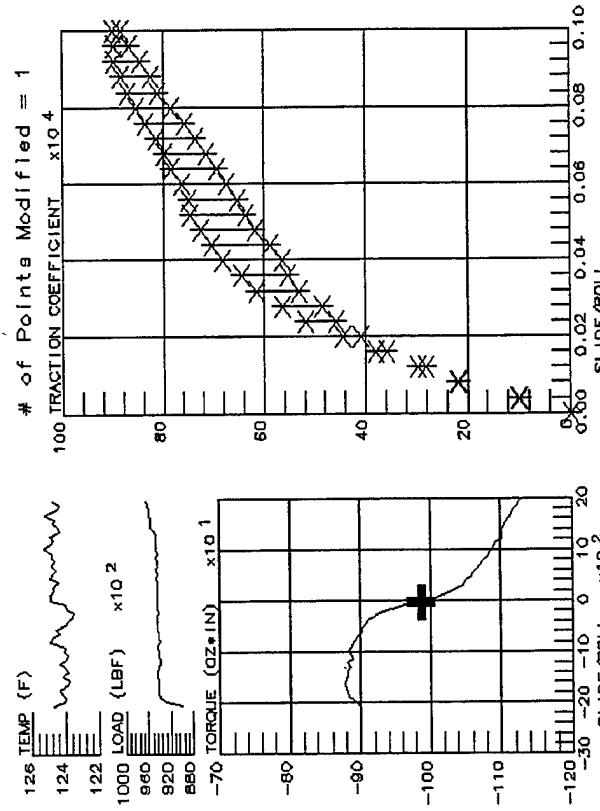
BC 89-126 Coray 100 used
120F 5LBF 3620RPM 2 FILE: bc120d

#74



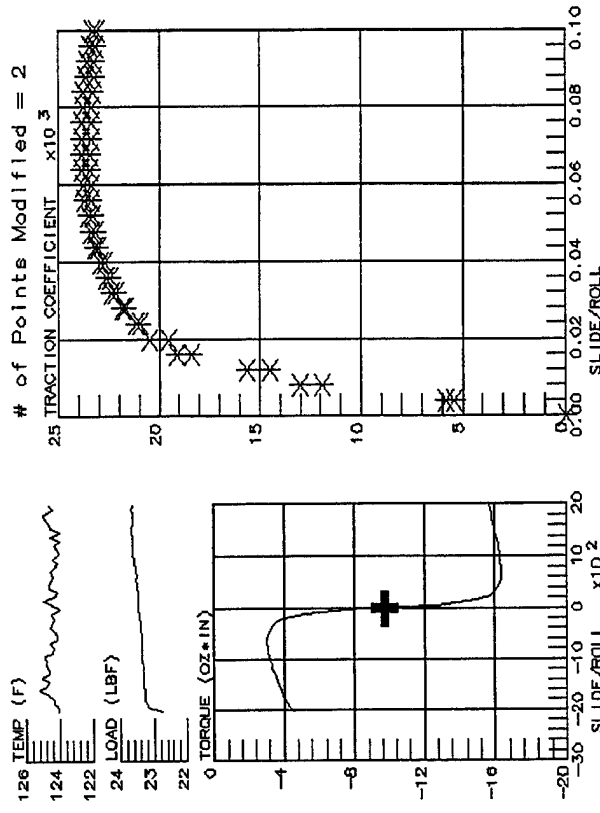
BC 89-126 Coray 100 used
120F 9LBF 3620RPM 3 FILE: bc120d

#75



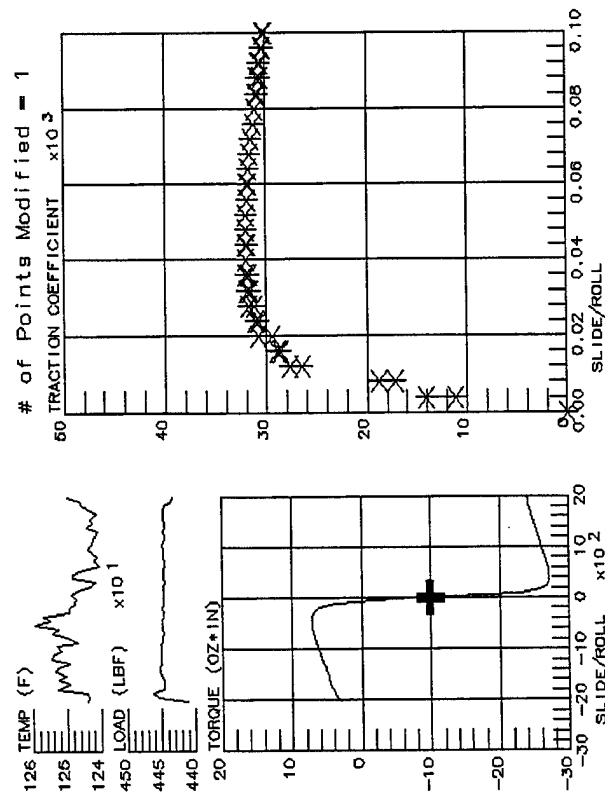
BC 89-126 Coray 100 used
120F 23LBF 3620RPM 4 FILE: bc120d

#76



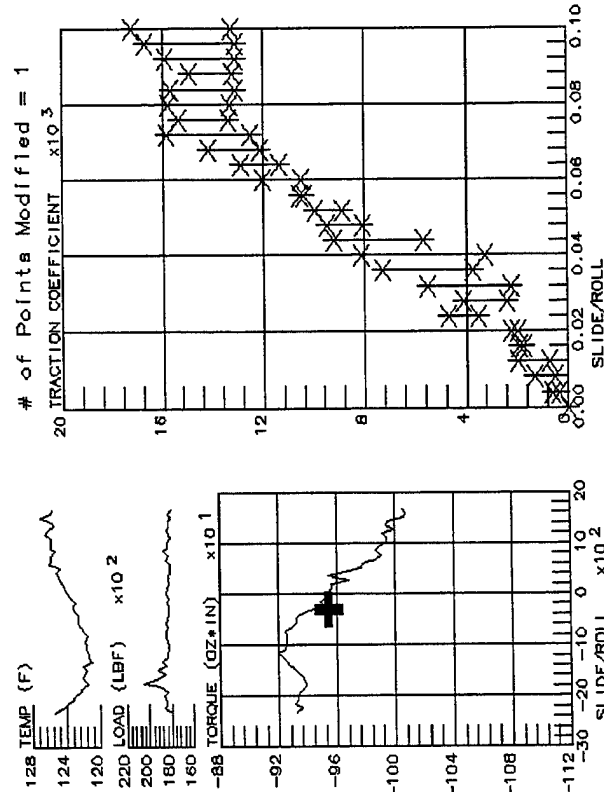
BC 89-126 Coray 100 used
120F 44LBF 3820RPM 5 FILE: bc120d

#77
of Points Modified = 1



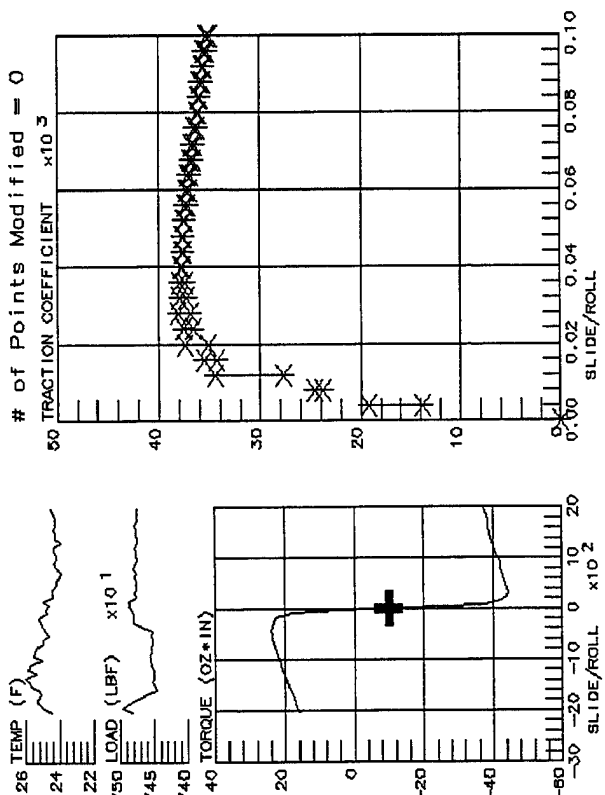
BC 89-126 Coray 100 used
120F 11LBF 5093RPM 1 FILE: bc120e

#79
of Points Modified = 1



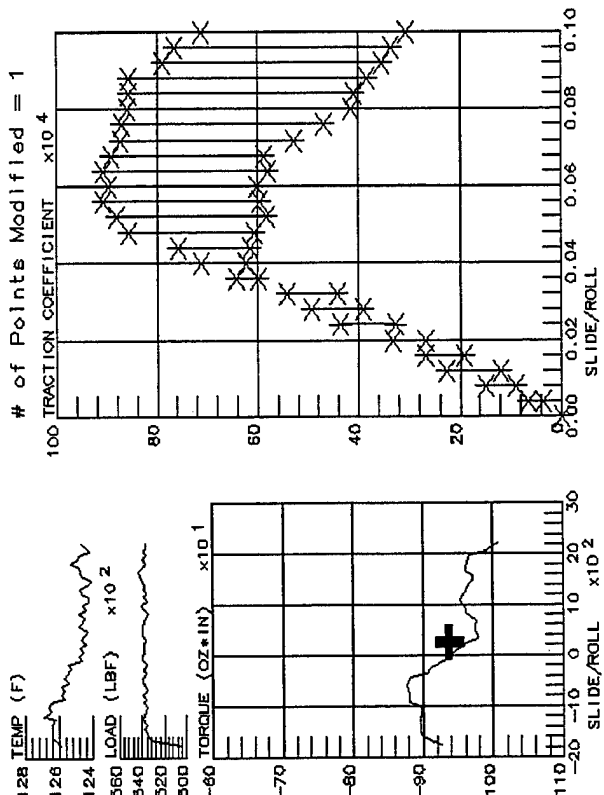
BC 89-126 Coray 100 used
120F 75LBF 3820RPM 6 FILE: bc120d

#78
of Points Modified = 0



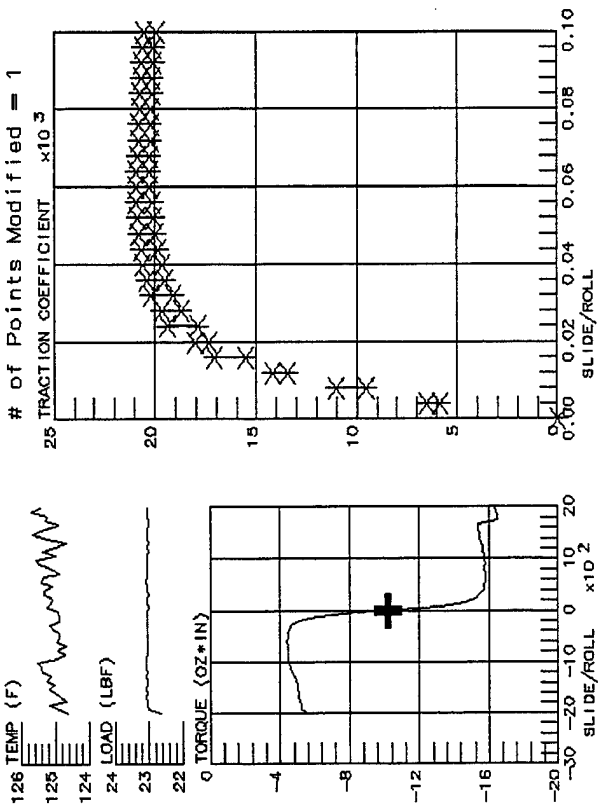
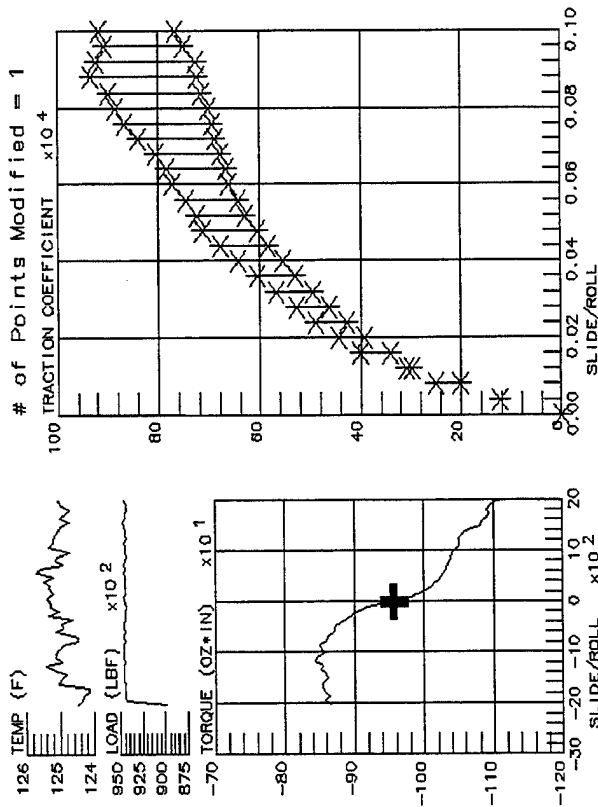
BC 89-126 Coray 100 used
120F 5LBF 5093RPM 2 FILE: bc120e

#80
of Points Modified = 1



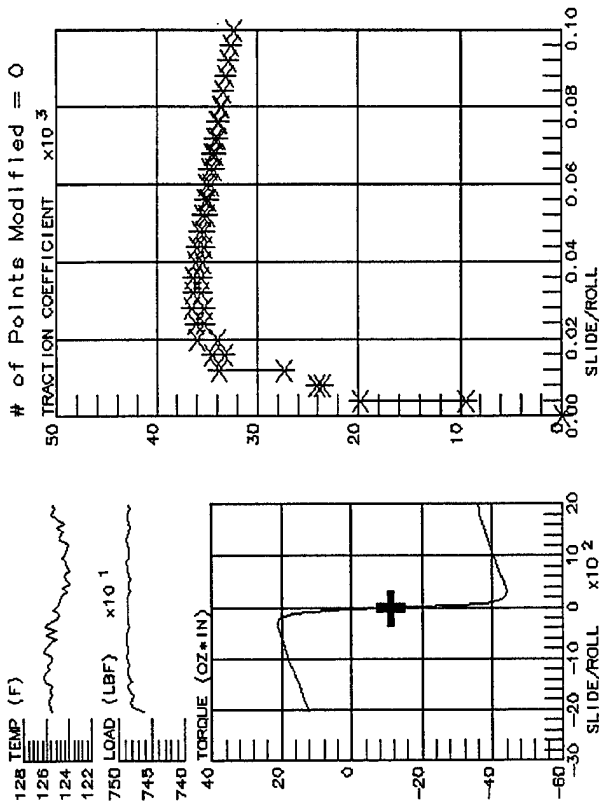
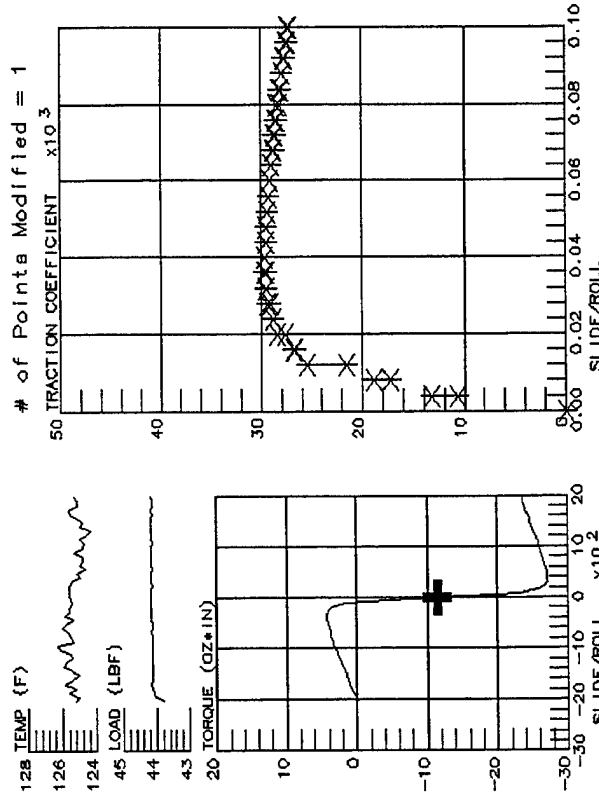
BC 89-126 Coray 100 used
120F 9LBF 5093RPM 3 FILE: bc120e

#81
#82
BC 89-126 Coray 100 used
120F 23LBF 5093RPM 4 FILE: bc120e



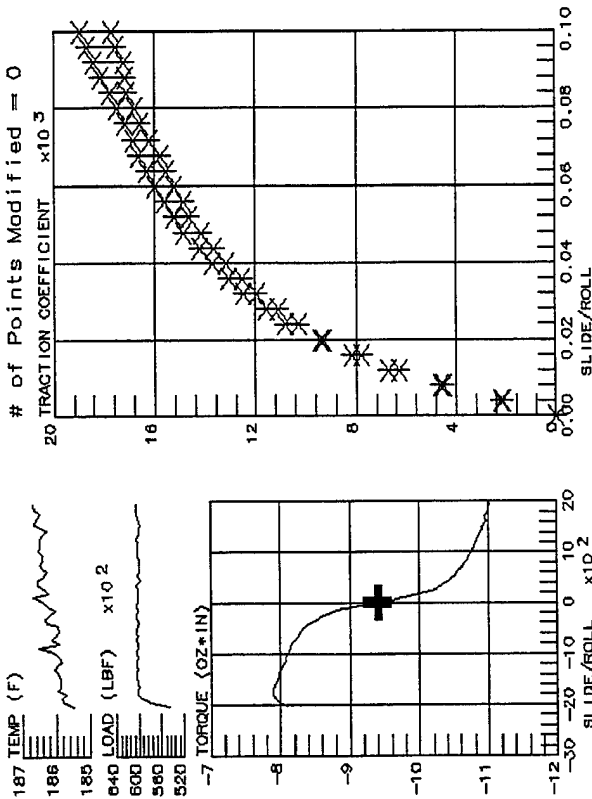
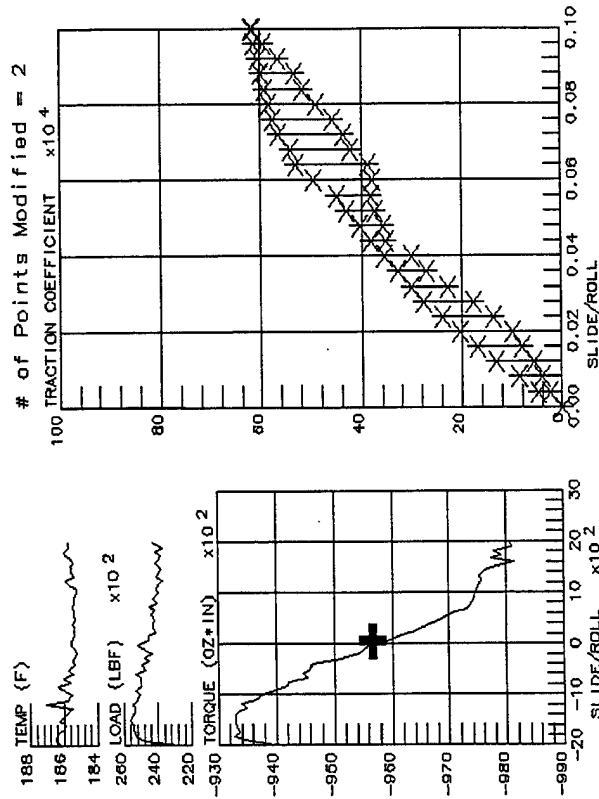
BC 89-126 Coray 100 used
120F 44LBF 5093RPM 5 FILE: bc120e

#83
#84
BC 89-126 Coray 100 used
120F 75LBF 5093RPM 6 FILE: bc120e



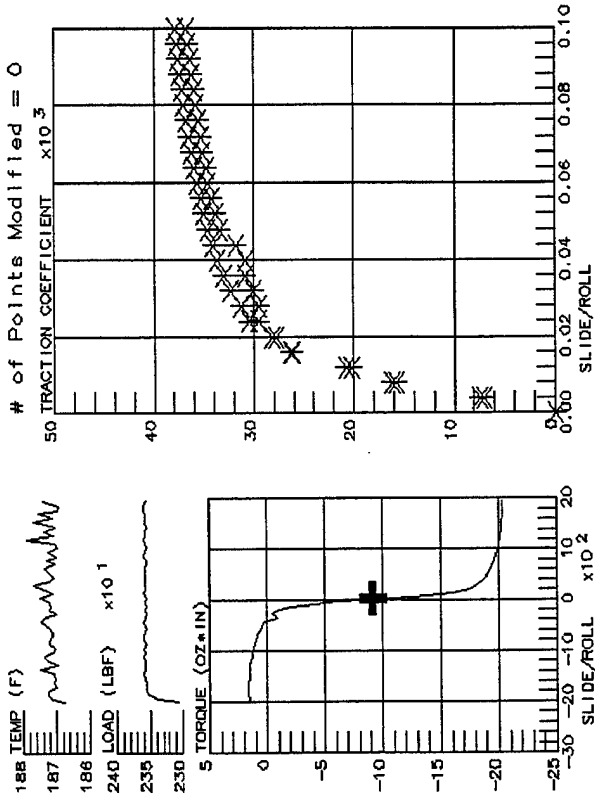
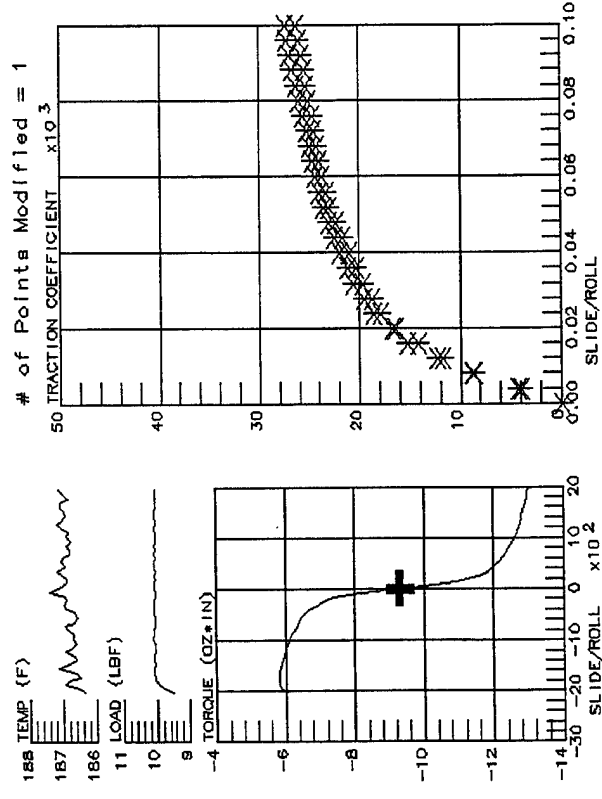
BC 89-126 Coray 100 used
180F 11BF 1273RPM 1 FILE: bc180b

#85
of Points Modified = 2



BC 89-126 Coray 100 used
180F 9LBF 1273RPM 3 FILE: bc180b

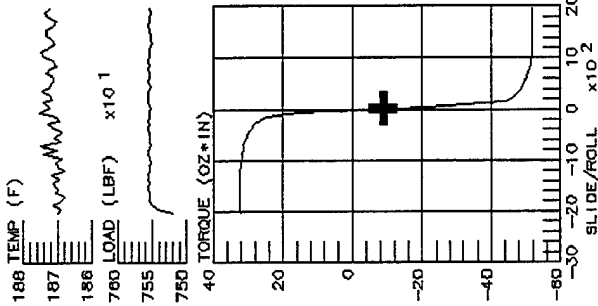
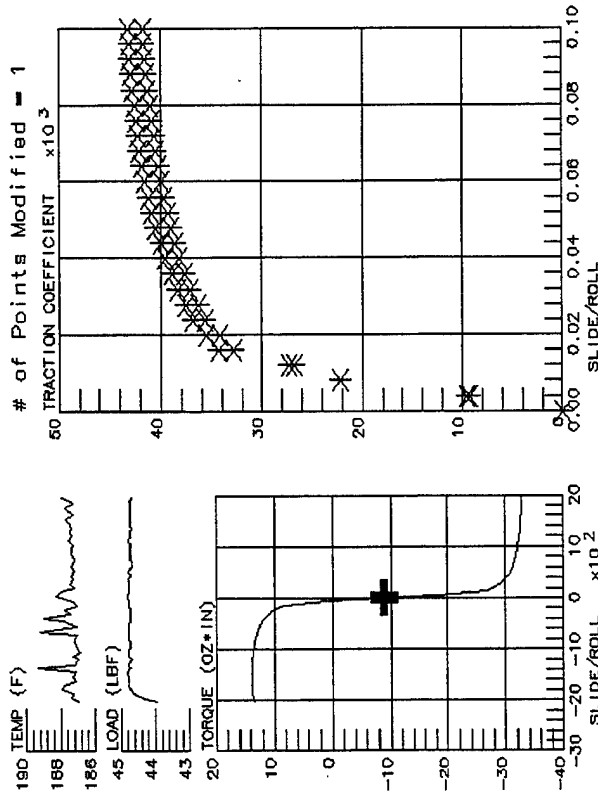
#87
of Points Modified = 1



TRACTION MODELS

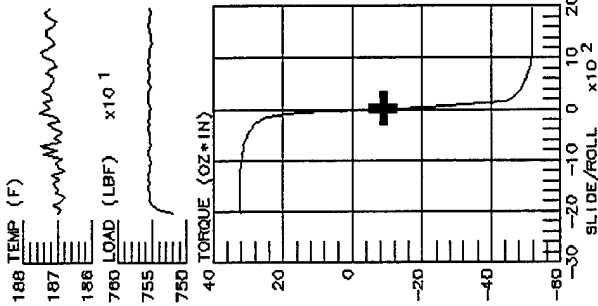
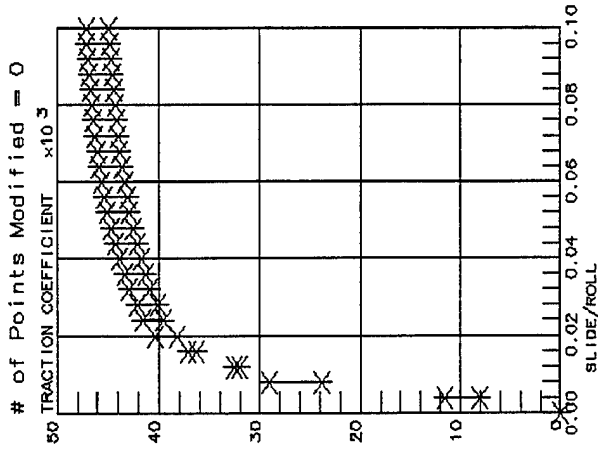
BC 89-126 Coray 100 used
180F 44LBF 1273RPM 5 FILE: bc180b

#89
of Points Modified = 1



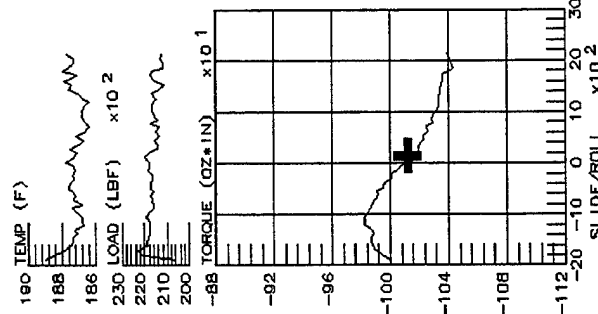
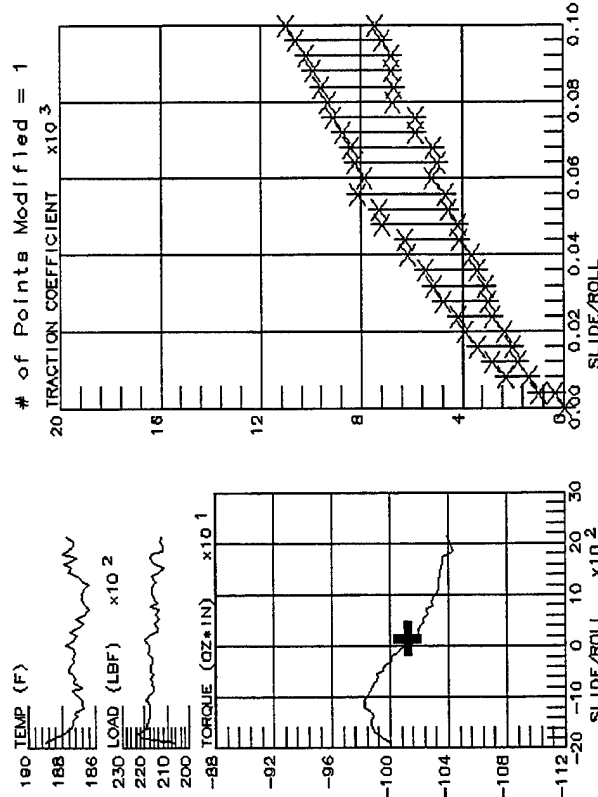
BC 89-126 Coray 100 used
180F 75LBF 1273RPM 8 FILE: bc180b

#90
of Points Modified = 0



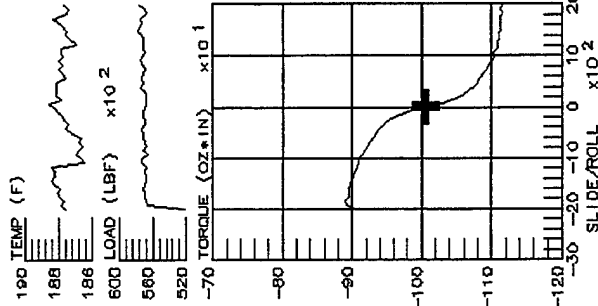
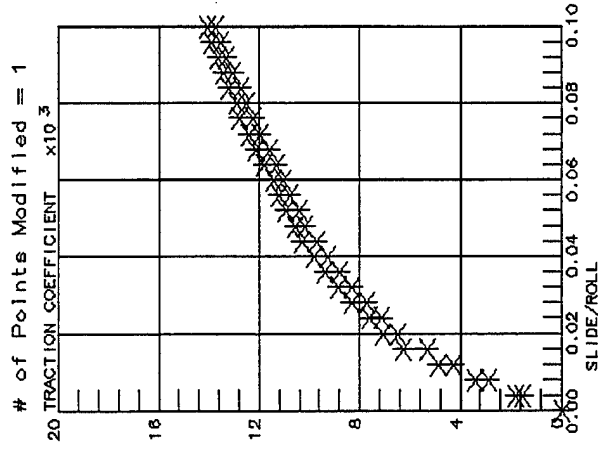
BC 89-126 Coray 100 used
180F 1LBF 2546RPM 1 FILE: bc180c

#91



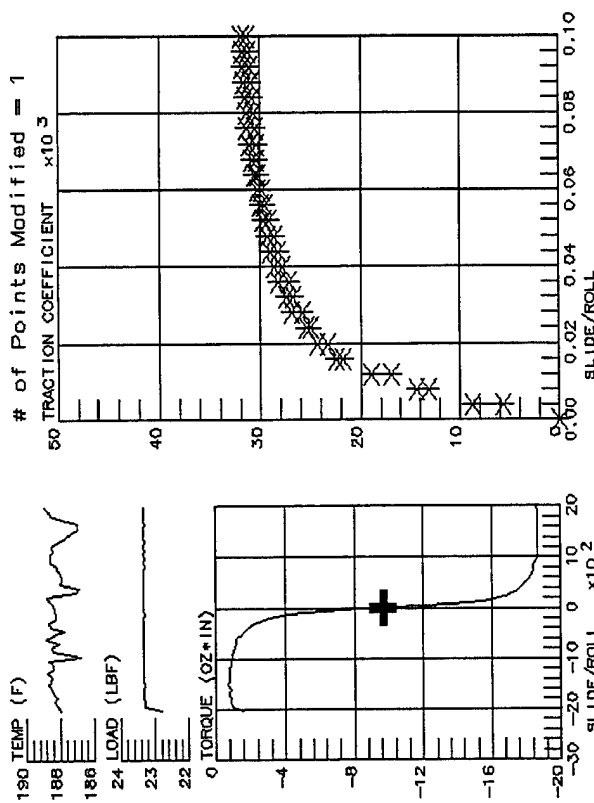
BC 89-126 Coray 100 used
180F 5LBF 2546RPM 2 FILE: bc180c

#92



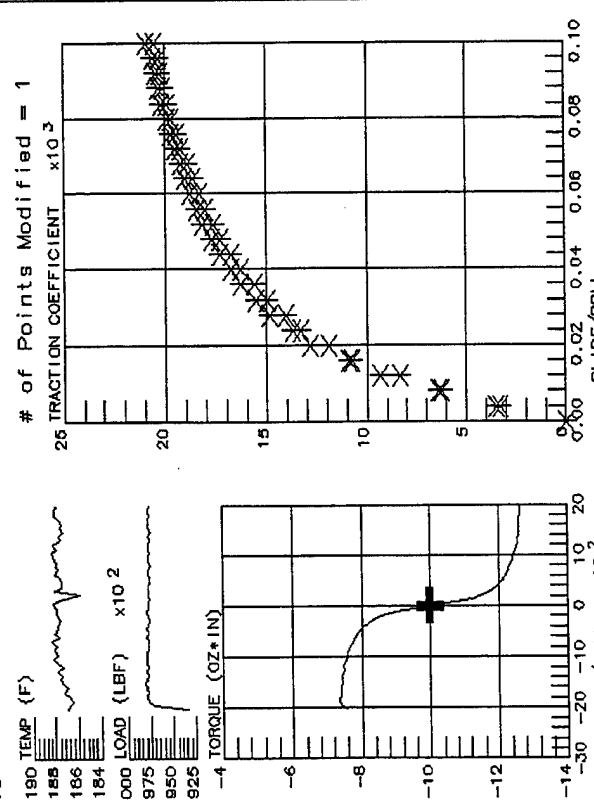
#94
BC 89-126 Coray 100 used
180F 23LBF 2546RPM 4 FILE: bc180c

of Points Modified = 1



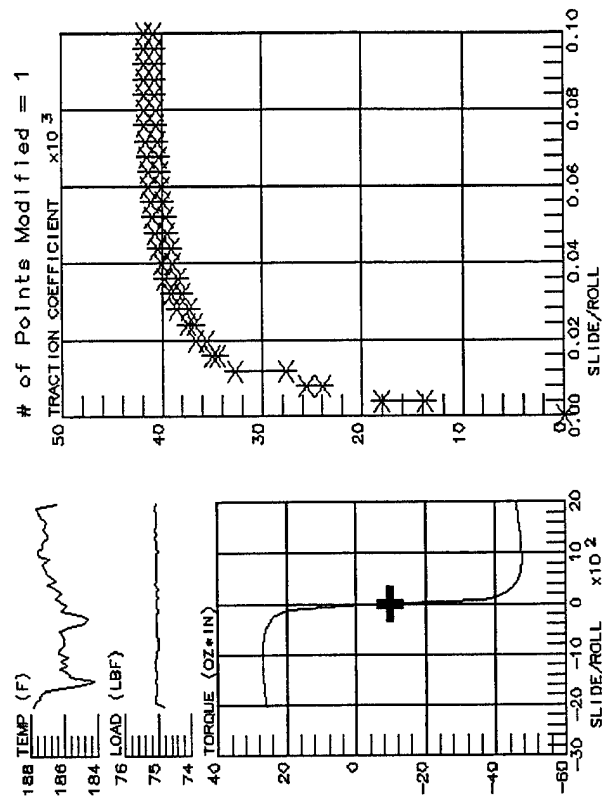
#93
BC 89-126 Coray 100 used
180F 9LBF 2546RPM 3 FILE: bc180c

of Points Modified = 1



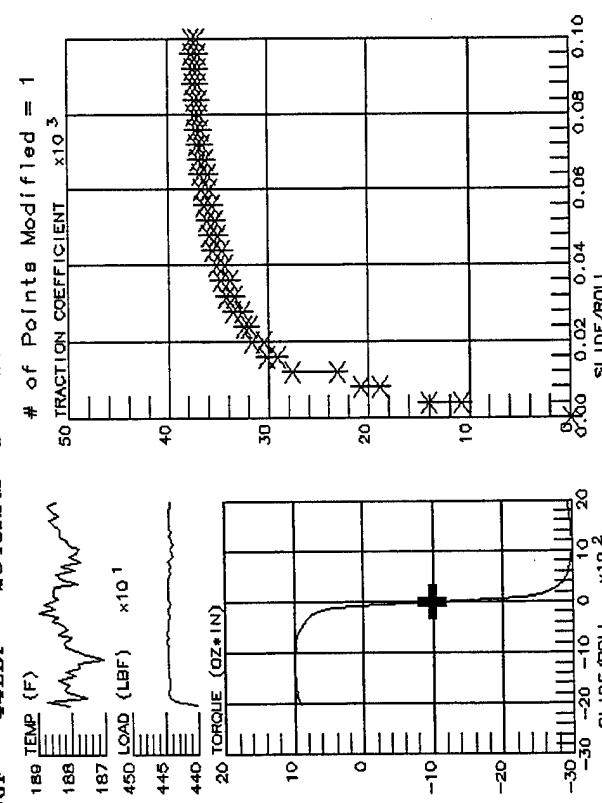
#96
BC 89-126 Coray 100 used
180F 75LBF 2546RPM 6 FILE: bc180c

of Points Modified = 1



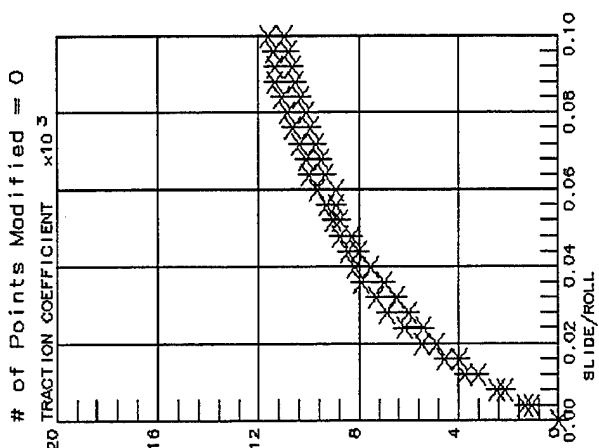
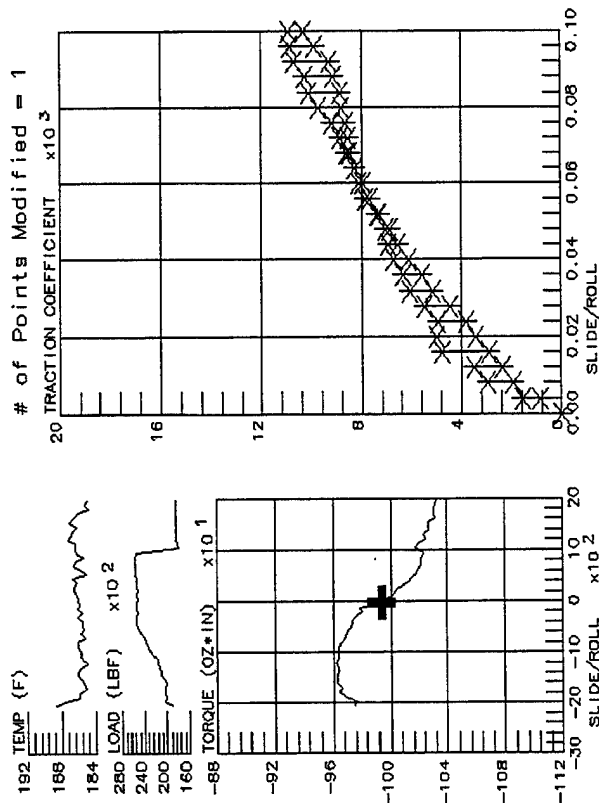
#95
BC 89-126 Coray 100 used
180F 44LBF 2546RPM 5 FILE: bc180c

of Points Modified = 1



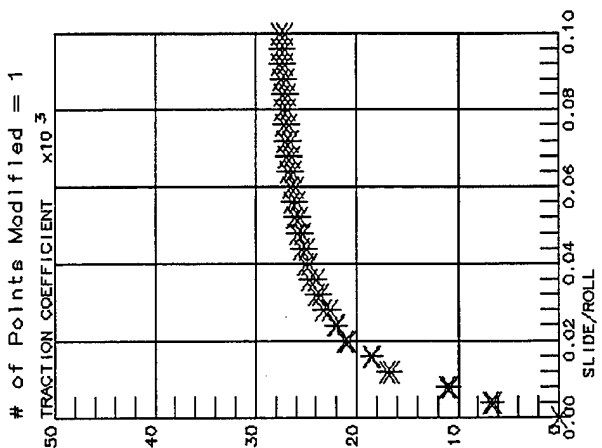
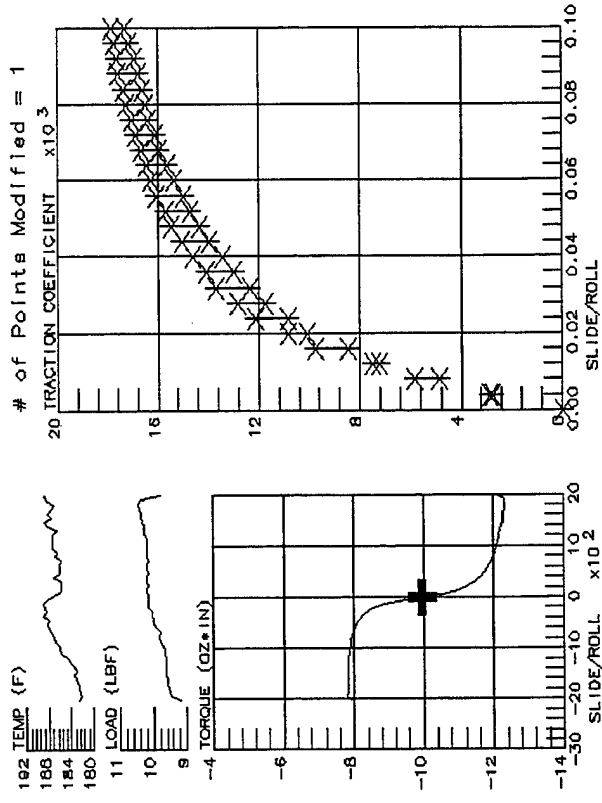
BC 89-126 Coray 100 used
180F 11BF 3820RPM 1 FILE: bc180d

BC 89-126 Coray 100 used
180F 5LBF 3820RPM 2 FILE: bc180d



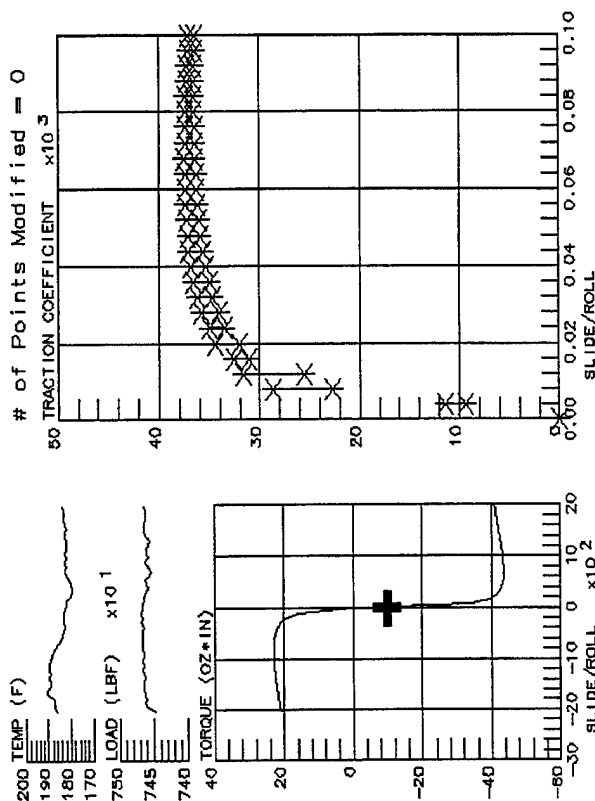
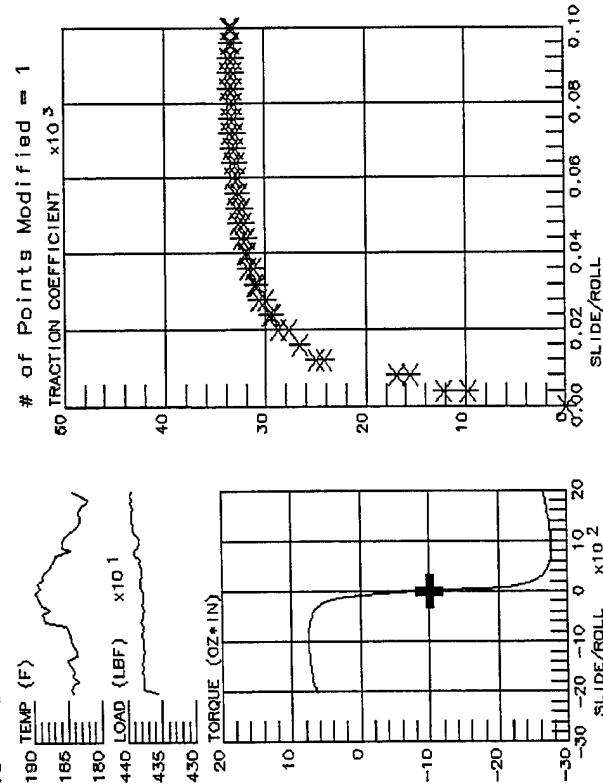
BC 89-126 Coray 100 used
180F 9LBF 3820RPM 3 FILE: bc180d

BC 89-126 Coray 100 used
180F 23LBF 3820RPM 4 FILE: bc180d



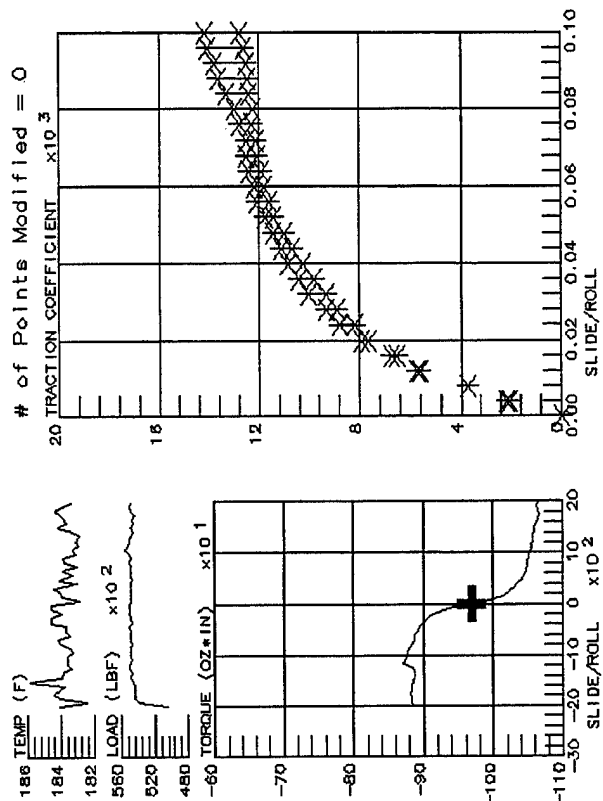
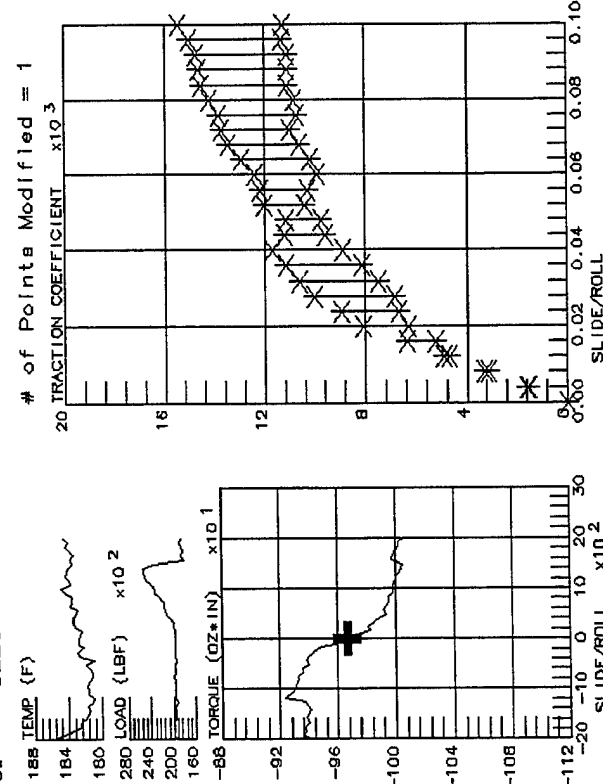
BC 89-126 Coray 100 used
180F 44LBF 3820RPM 5 FILE: bc180d

#101
of Points Modified = 1



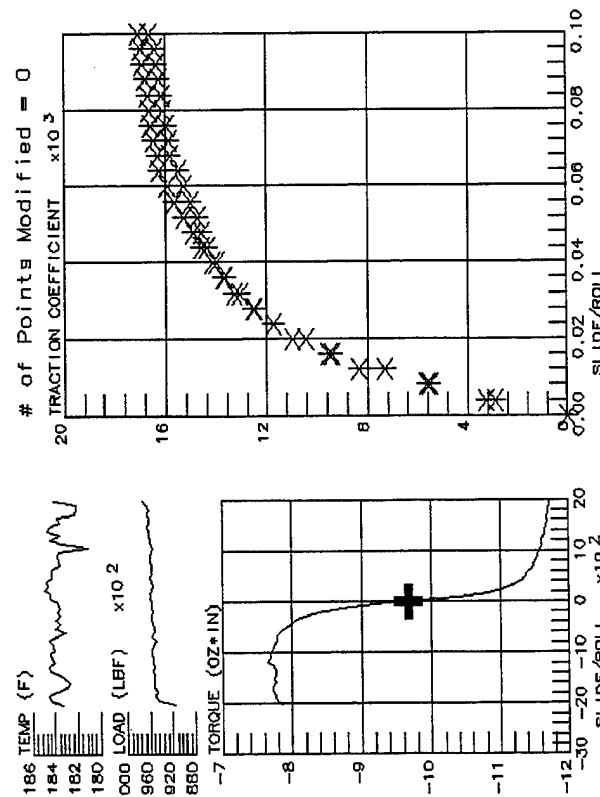
BC 89-126 Coray 100 used
180F 11LBF 5093RPM 1 FILE: bc180e

#103
of Points Modified = 1



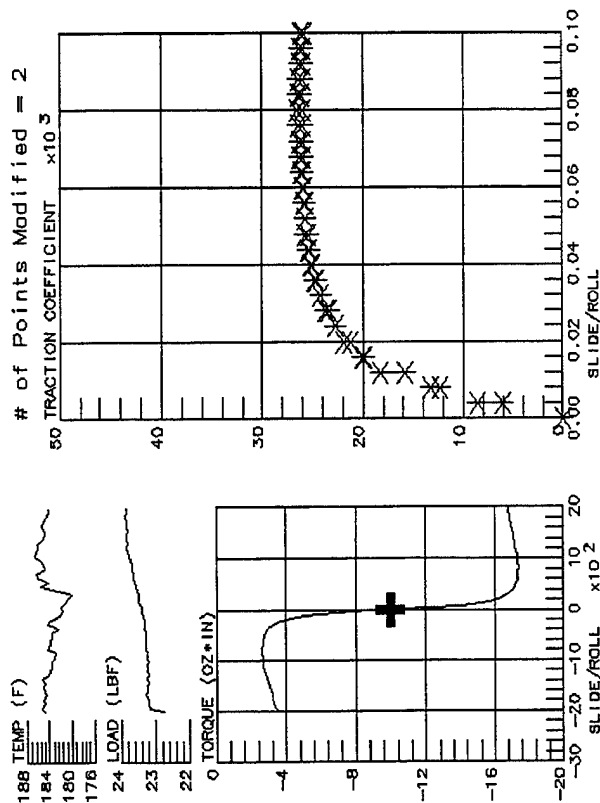
BC 89-126 Coray 100 used
180F 91BF 5093RPM 3 FILE: bc180e

#105
of Points Modified = 0



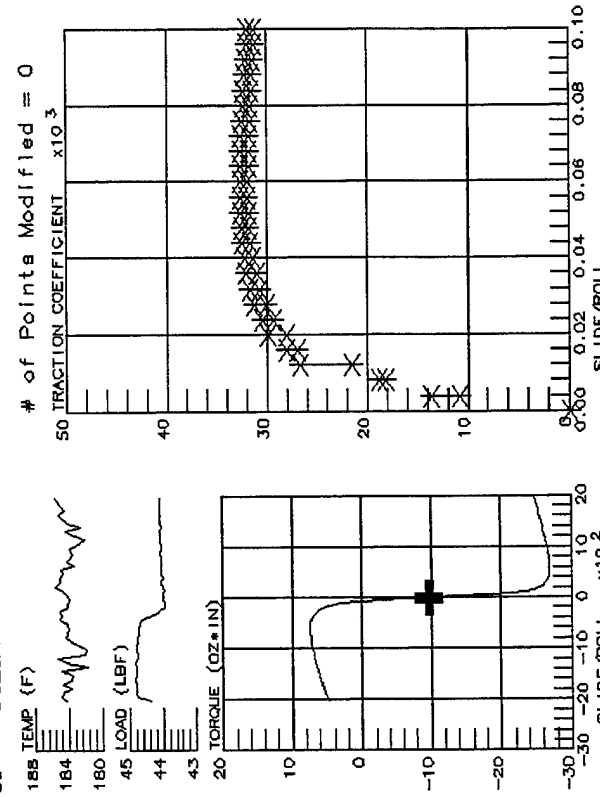
BC 89-126 Coray 100 used
180F 23LBF 5093RPM 4 FILE: bc180e

#108
of Points Modified = 2



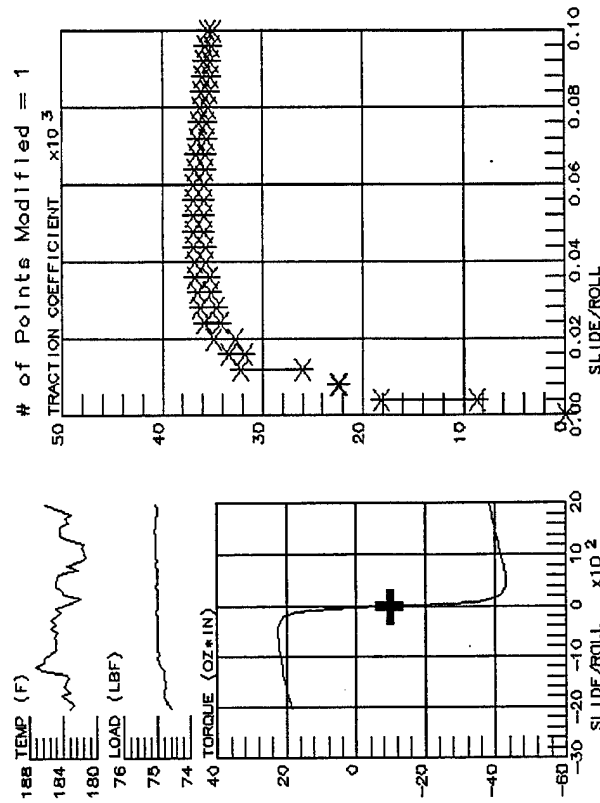
BC 89-126 Coray 100 used
180F 44LBF 5093RPM 5 FILE: bc180e

#107
of Points Modified = 0



BC 89-126 Coray 100 used
180F 75LBF 5093RPM 6 FILE: bc180e

#108
of Points Modified = 1



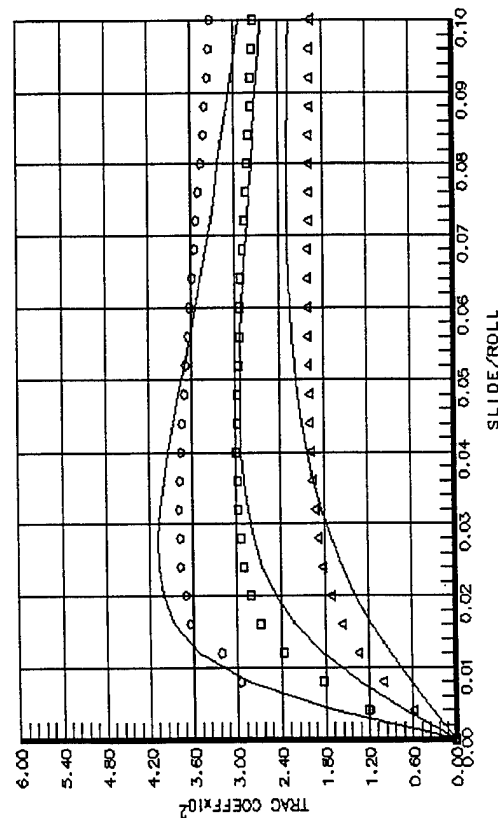
Lubricant name = BC 89-105 Coray 100 used

NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| bc1.dat | 2.9722E+02 | 5.0790E+00 | 3.1313E+00 | 7.5000E-09 | 1.6804E-01 |
| bc2.dat | 2.9722E+02 | 7.6206E+00 | 1.8401E+00 | 7.5000E-09 | 1.2427E-01 |
| bc3.dat | 2.9722E+02 | 1.0160E+01 | 8.6139E-01 | 7.5000E-09 | 9.6579E-02 |
| bc4.dat | 3.1111E+02 | 5.0790E+00 | 2.6113E+00 | 7.5000E-09 | 2.3954E-01 |
| bc5.dat | 3.1111E+02 | 7.6206E+00 | 9.5654E-01 | 7.5000E-09 | 1.5271E-01 |
| bc6.dat | 3.1111E+02 | 1.0160E+01 | 6.9371E-01 | 7.5000E-09 | 1.1600E-01 |
| bc7.dat | 3.2222E+02 | 5.0790E+00 | 2.6543E+00 | 7.5000E-09 | 3.2465E-01 |
| bc8.dat | 3.2222E+02 | 7.6206E+00 | 1.2599E+00 | 7.5000E-09 | 1.9913E-01 |
| bc9.dat | 3.2222E+02 | 1.0160E+01 | 8.8766E-01 | 7.5000E-09 | 1.4960E-01 |

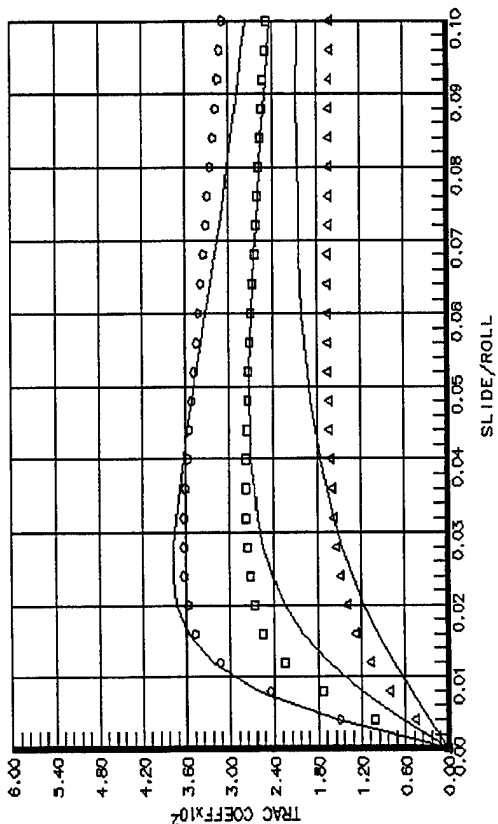
BC 89-126 Coray 100 used

NEWTONIAN MODEL TYPE 1 bog.dat XMU* ALFA* BETA*
 102N 7.62M/S 311K # 52 9.585E-01 7.500E-09 1.627E-01
 196N 7.62M/S 311K # 53 9.585E-01 7.500E-09 1.627E-01
 334N 7.62M/S 311K # 54 9.585E-01 7.500E-09 1.627E-01



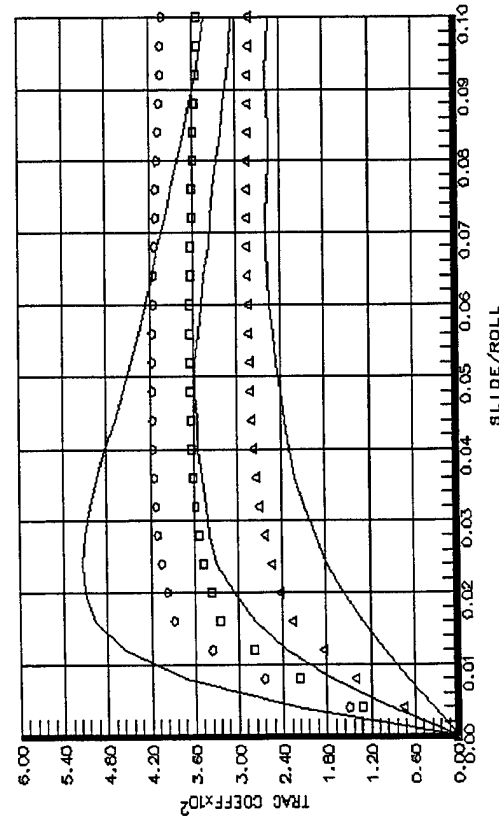
BC 89-126 Coray 100 used

NEWTONIAN MODEL TYPE 1 bog.dat XMU* ALFA* BETA*
 102N 10.16M/S 311K # 58 8.937E-01 7.500E-09 1.160E-01
 196N 10.16M/S 311K # 59 8.937E-01 7.500E-09 1.160E-01
 334N 10.16M/S 311K # 60 8.937E-01 7.500E-09 1.160E-01



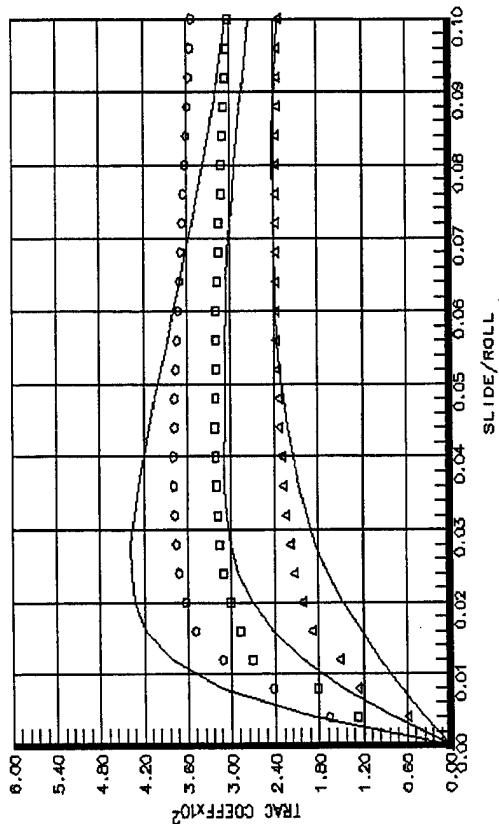
BC 89-126 Coray 100 used

NEWTONIAN MODEL TYPE 1 bog.dat XMU* ALFA* BETA*
 102N 5.08M/S 322K # 70 2.654E+00 7.500E-09 3.247E-01
 196N 5.08M/S 322K # 71 2.654E+00 7.500E-09 3.247E-01
 334N 5.08M/S 322K # 72 2.654E+00 7.500E-09 3.247E-01



BC 89-126 Coray 100 used

NEWTONIAN MODEL TYPE 1 bog.dat XMU* ALFA* BETA*
 102N 7.63M/S 322K # 78 1.260E+00 7.500E-09 1.991E-01
 196N 7.63M/S 322K # 77 1.260E+00 7.500E-09 1.991E-01
 334N 7.63M/S 322K # 78 1.260E+00 7.500E-09 1.991E-01



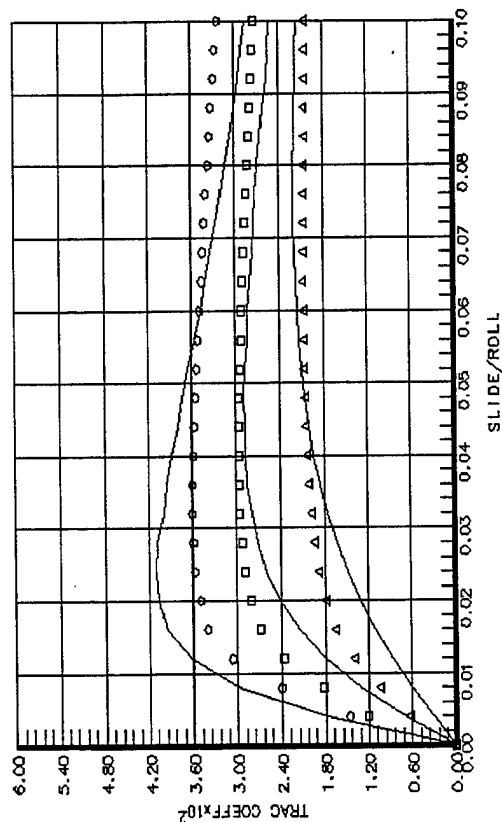
BC 89-126 Coray 100 used

NEWTONIAN MODEL TYPE 1 b09.del XMU* ALFA* BETA*

Δ 875MPa 102N 10.18M/S 322K # 82 8.877E-01 7.800E-09 1.486E-01

□ 835MPa 196N 10.18M/S 322K # 83 8.877E-01 7.800E-09 1.496E-01

○ 1000MPa 334N 10.18M/S 322K # 84 8.877E-01 7.800E-09 1.496E-01



7. Traction Data Set F:

93-172 PAO + 16.5% 93-141 + Additives

Data set name: CM 93-172 PAO+16.5% 93-141 + Additives
 Rolling radii [Disks 1 & 2] (in): 0.73 0.73
 Crown radii [Disks 1 & 2] (in): 999.00 999.00

Number of data sets found = 161

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 18.39 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-05 | cm80l #1 |
| 2 | 80.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.61E-05 | cm80l #2 |
| 3 | 80.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.34E-04 | cm80l #3 |
| 4 | 80.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.85E-04 | cm80l #4 |
| 5 | 80.00 | 18.39 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.86E-05 | cm80l #5 |
| 6 | 80.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.89E-05 | cm80l #6 |
| 7 | 80.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.44E-05 | cm80l #7 |
| 8 | 80.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.70E-05 | cm80l #8 |
| 9 | 80.00 | 18.39 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.85E-05 | cm80lx #1 |
| 10 | 80.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.19E-05 | cm80lx #2 |
| 11 | 80.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.36E-04 | cm80lx #3 |
| 12 | 80.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.00E-03 | cm80lx #4 |
| 13 | 80.00 | 18.39 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.42E-05 | cm80h #1 |
| 14 | 80.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.88E-05 | cm80h #2 |
| 15 | 80.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-04 | cm80h #3 |
| 16 | 80.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.14E-04 | cm80h #4 |
| 17 | 80.00 | 18.39 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-04 | cm80h #5 |
| 18 | 80.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.12E-05 | cm80h #6 |
| 19 | 80.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.87E-05 | cm80h #7 |
| 20 | 80.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-04 | cm80h #8 |
| 21 | 80.00 | 18.39 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.92E-05 | cm80h #9 |
| 22 | 80.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.77E-05 | cm80h #10 |
| 23 | 80.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.10E-05 | cm80h #11 |
| 24 | 80.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.59E-05 | cm80h #12 |
| 25 | 80.00 | 18.39 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.64E-05 | cm80h #13 |
| 26 | 80.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-04 | cm80h #14 |
| 27 | 80.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.06E-05 | cm80h #15 |
| 28 | 80.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.30E-04 | cm80h #16 |
| 29 | 100.00 | 18.39 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.90E-05 | cm100l #1 |
| 30 | 100.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-04 | cm100l #2 |
| 31 | 100.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.02E-05 | cm100l #3 |
| 32 | 100.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.62E-03 | cm100l #4 |
| 33 | 100.00 | 18.39 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-05 | cm100l #5 |
| 34 | 100.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-04 | cm100l #6 |
| 35 | 100.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.19E-04 | cm100l #7 |
| 36 | 100.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.70E-05 | cm100l #8 |
| 37 | 100.00 | 18.39 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.28E-05 | cm100l #9 |
| 38 | 100.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.80E-05 | cm100l #10 |
| 39 | 100.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.18E-05 | cm100l #11 |
| 40 | 100.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.54E-05 | cm100l #12 |
| 41 | 100.00 | 18.39 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | cm100h #1 |
| 42 | 100.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.54E-05 | cm100h #2 |
| 43 | 100.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-05 | cm100h #3 |
| 44 | 100.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.34E-04 | cm100h #4 |
| 45 | 100.00 | 18.39 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-04 | cm100h #5 |
| 46 | 100.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.34E-05 | cm100h #6 |
| 47 | 100.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.71E-05 | cm100h #7 |
| 48 | 100.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.83E-05 | cm100h #8 |
| 49 | 100.00 | 18.39 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.84E-05 | cm100h #9 |
| 50 | 100.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-05 | cm100h #10 |

Data set: CM 93-172 PA0+16.5% 93-141 + Additivescontinued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.95E-05 | cm100h #11 |
| 52 | 100.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.60E-05 | cm100h #12 |
| 53 | 100.00 | 18.39 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.37E-04 | cm100h #13 |
| 54 | 100.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.99E-05 | cm100h #14 |
| 55 | 100.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.16E-05 | cm100h #15 |
| 56 | 100.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.52E-04 | cm100h #16 |
| 57 | 150.00 | 18.39 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-04 | cm150l #1 |
| 58 | 150.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.85E-04 | cm150l #2 |
| 59 | 150.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.94E-04 | cm150l #3 |
| 60 | 150.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.17E-05 | cm150l #4 |
| 61 | 150.00 | 18.39 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.02E-06 | cm150l #5 |
| 62 | 150.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-05 | cm150l #6 |
| 63 | 150.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.66E-05 | cm150l #7 |
| 64 | 150.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.41E-05 | cm150l #8 |
| 65 | 150.00 | 18.39 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.01E-06 | cm150l #9 |
| 66 | 150.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.55E-06 | cm150l #10 |
| 67 | 150.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.79E-05 | cm150l #11 |
| 68 | 150.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.46E-05 | cm150l #12 |
| 69 | 150.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.63E-06 | cm150h #1 |
| 70 | 150.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.45E-05 | cm150h #2 |
| 71 | 150.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.17E-05 | cm150h #3 |
| 72 | 150.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-05 | cm150h #4 |
| 73 | 150.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.13E-05 | cm150h #5 |
| 74 | 150.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-05 | cm150h #6 |
| 75 | 150.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.61E-05 | cm150h #7 |
| 76 | 150.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-05 | cm150h #8 |
| 77 | 150.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.32E-05 | cm150h #9 |
| 78 | 150.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.55E-05 | cm150h #10 |
| 79 | 150.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.06E-05 | cm150h #11 |
| 80 | 150.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.20E-05 | cm150h #12 |
| 81 | 200.00 | 18.39 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.38E-04 | cm200l #1 |
| 82 | 200.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.31E-05 | cm200l #2 |
| 83 | 200.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-04 | cm200l #3 |
| 84 | 200.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.32E-04 | cm200l #4 |
| 85 | 200.00 | 18.39 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.40E-05 | cm200l #5 |
| 86 | 200.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-04 | cm200l #6 |
| 87 | 200.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.68E-05 | cm200l #7 |
| 88 | 200.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.89E-04 | cm200l #8 |
| 89 | 200.00 | 18.39 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.08E-05 | cm200l #9 |
| 90 | 200.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.17E-06 | cm200l #10 |
| 91 | 200.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.68E-05 | cm200l #11 |
| 92 | 200.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.51E-05 | cm200l #12 |
| 93 | 200.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-04 | cm200h #1 |
| 94 | 200.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.84E-06 | cm200h #2 |
| 95 | 200.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.02E-05 | cm200h #3 |
| 96 | 200.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.21E-05 | cm200h #4 |
| 97 | 200.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.08E-06 | cm200h #5 |
| 98 | 200.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-05 | cm200h #6 |
| 99 | 200.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.54E-06 | cm200h #7 |
| 100 | 200.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.43E-06 | cm200h #8 |
| 101 | 200.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.19E-05 | cm200h #9 |
| 102 | 200.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-04 | cm200h #10 |
| 103 | 200.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-05 | cm200h #11 |
| 104 | 200.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.74E-05 | cm200h #12 |
| 105 | 220.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.53E-06 | cm212ha #1 |
| 106 | 220.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.15E-06 | cm212ha #2 |
| 107 | 220.00 | 35.93 | 6163.00 | 6811.00 | 6487.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-05 | cm212ha #3 |
| 108 | 220.00 | 62.13 | 6163.00 | 6811.00 | 6487.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.71E-05 | cm212ha #4 |
| 109 | 250.00 | 18.39 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-04 | cm250l #1 |
| 110 | 250.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.97E-04 | cm250l #2 |
| 111 | 250.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.46E-05 | cm250l #3 |
| 112 | 250.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-04 | cm250l #4 |
| 113 | 250.00 | 18.39 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.09E-04 | cm250l #5 |
| 114 | 250.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.97E-04 | cm250l #6 |
| 115 | 250.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.23E-04 | cm250l #7 |
| 116 | 250.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.53E-04 | cm250l #8 |
| 117 | 250.00 | 18.39 | 693.00 | 627.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.61E-04 | cm250l #9 |
| 118 | 250.00 | 35.93 | 693.00 | 627.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.94E-04 | cm250l #10 |
| 119 | 250.00 | 62.13 | 693.00 | 627.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-04 | cm250l #11 |
| 120 | 250.00 | 98.62 | 693.00 | 627.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.10E-04 | cm250l #12 |

Data set: CM 93-172 PA0+16.5% 93-141 + Additivescontinued

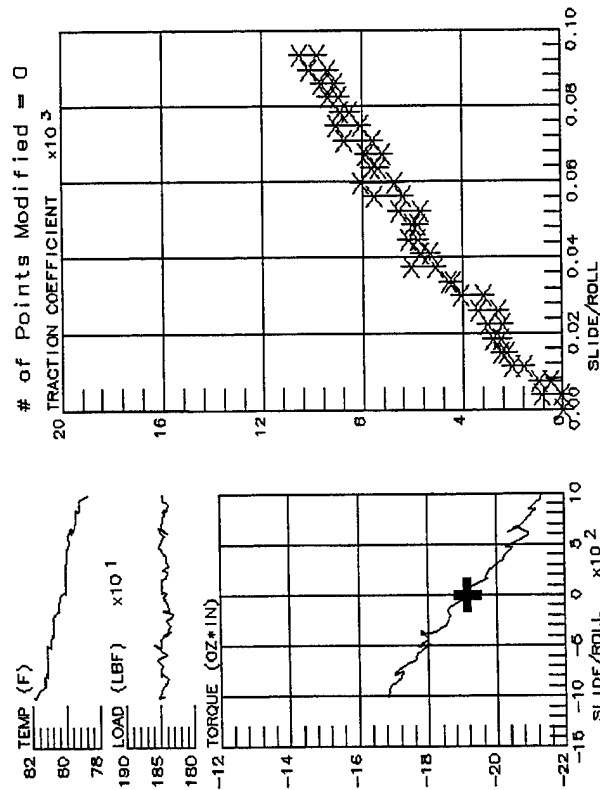
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 250.00 | 18.39 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.01E-05 | cm250l #13 |
| 122 | 250.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.46E-05 | cm250l #14 |
| 123 | 250.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-05 | cm250l #15 |
| 124 | 250.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.21E-05 | cm250l #16 |
| 125 | 250.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.21E-05 | cm250h #1 |
| 126 | 250.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.33E-06 | cm250h #2 |
| 127 | 250.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.74E-05 | cm250h #3 |
| 128 | 250.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-05 | cm250h #4 |
| 129 | 250.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.72E-06 | cm250h #5 |
| 130 | 250.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.25E-06 | cm250h #6 |
| 131 | 250.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.61E-05 | cm250h #7 |
| 132 | 250.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.88E-06 | cm250h #8 |
| 133 | 250.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.46E-06 | cm250h #9 |
| 134 | 250.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.37E-05 | cm250h #10 |
| 135 | 250.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.33E-06 | cm250h #11 |
| 136 | 250.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.26E-06 | cm250h #12 |
| 137 | 300.00 | 35.93 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.57E-04 | cm300l #1 |
| 138 | 300.00 | 62.13 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.19E-04 | cm300l #2 |
| 139 | 300.00 | 98.62 | 290.00 | 330.00 | 310.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.35E-04 | cm300l #3 |
| 140 | 300.00 | 35.93 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.75E-04 | cm300l #4 |
| 141 | 300.00 | 62.13 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-04 | cm300l #5 |
| 142 | 300.00 | 98.62 | 627.00 | 693.00 | 660.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.76E-05 | cm300l #6 |
| 143 | 300.00 | 35.93 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-05 | cm300l #7 |
| 144 | 300.00 | 62.13 | 1217.00 | 1345.00 | 1281.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.32E-06 | cm300l #8 |
| 145 | 300.00 | 98.62 | 1217.00 | 1345.00 | 1281.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.59E-05 | cm300l #9 |
| 146 | 300.00 | 18.39 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.31E-05 | cm300h #1 |
| 147 | 300.00 | 35.93 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.21E-06 | cm300h #2 |
| 148 | 300.00 | 62.13 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.15E-06 | cm300h #3 |
| 149 | 300.00 | 98.62 | 2472.00 | 2732.00 | 2602.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.41E-06 | cm300h #4 |
| 150 | 300.00 | 18.39 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-05 | cm300h #5 |
| 151 | 300.00 | 35.93 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.64E-06 | cm300h #6 |
| 152 | 300.00 | 62.13 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.24E-06 | cm300h #7 |
| 153 | 300.00 | 98.62 | 4908.00 | 5424.00 | 5166.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.54E-06 | cm300h #8 |
| 154 | 300.00 | 18.39 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.32E-05 | cm300h #9 |
| 155 | 300.00 | 35.93 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.30E-05 | cm300h #10 |
| 156 | 300.00 | 62.13 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.57E-06 | cm300h #11 |
| 157 | 300.00 | 98.62 | 7381.00 | 8157.00 | 7769.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.91E-06 | cm300h #12 |
| 158 | 300.00 | 18.39 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.17E-05 | cm300h #13 |
| 159 | 300.00 | 35.93 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.38E-05 | cm300h #14 |
| 160 | 300.00 | 62.13 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.40E-06 | cm300h #15 |
| 161 | 300.00 | 98.62 | 9852.00 | 10890.00 | 10371.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.08E-06 | cm300h #16 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-------------|
| cm1.dat | 80.00 | 1281.00 | 6 7 8 |
| cm2.dat | 80.00 | 2602.00 | 14 15 16 |
| cm3.dat | 80.00 | 5166.00 | 18 19 20 |
| cm4.dat | 80.00 | 7769.00 | 22 23 24 |
| cm5.dat | 80.00 | 10371.00 | 26 27 28 |
| cm6.dat | 100.00 | 1281.00 | 38 39 40 |
| cm7.dat | 100.00 | 2602.00 | 42 43 44 |
| cm8.dat | 100.00 | 5166.00 | 46 47 48 |
| cm9.dat | 100.00 | 7769.00 | 50 51 52 |
| cm10.dat | 100.00 | 10371.00 | 54 55 56 |
| cm11.dat | 150.00 | 1281.00 | 66 67 68 |
| cm12.dat | 150.00 | 2602.00 | 69 70 71 |
| cm13.dat | 150.00 | 5166.00 | 72 73 74 |
| cm14.dat | 150.00 | 7769.00 | 75 76 77 |
| cm15.dat | 150.00 | 10371.00 | 78 79 80 |
| cm16.dat | 200.00 | 1281.00 | 90 91 92 |
| cm17.dat | 200.00 | 2602.00 | 93 94 95 |
| cm18.dat | 200.00 | 5166.00 | 96 97 98 |
| cm19.dat | 200.00 | 7769.00 | 99 100 101 |
| cm20.dat | 200.00 | 10371.00 | 102 103 104 |
| cm21.dat | 250.00 | 1281.00 | 122 123 124 |
| cm22.dat | 250.00 | 2602.00 | 125 126 127 |
| cm23.dat | 250.00 | 5166.00 | 128 129 130 |
| cm24.dat | 250.00 | 7769.00 | 131 132 133 |
| cm25.dat | 250.00 | 10371.00 | 134 135 136 |
| cm26.dat | 300.00 | 1281.00 | 143 144 145 |
| cm27.dat | 300.00 | 2602.00 | 147 148 149 |
| cm28.dat | 300.00 | 5166.00 | 151 152 153 |
| cm29.dat | 300.00 | 7769.00 | 155 156 157 |
| cm30.dat | 300.00 | 10371.00 | 159 160 161 |

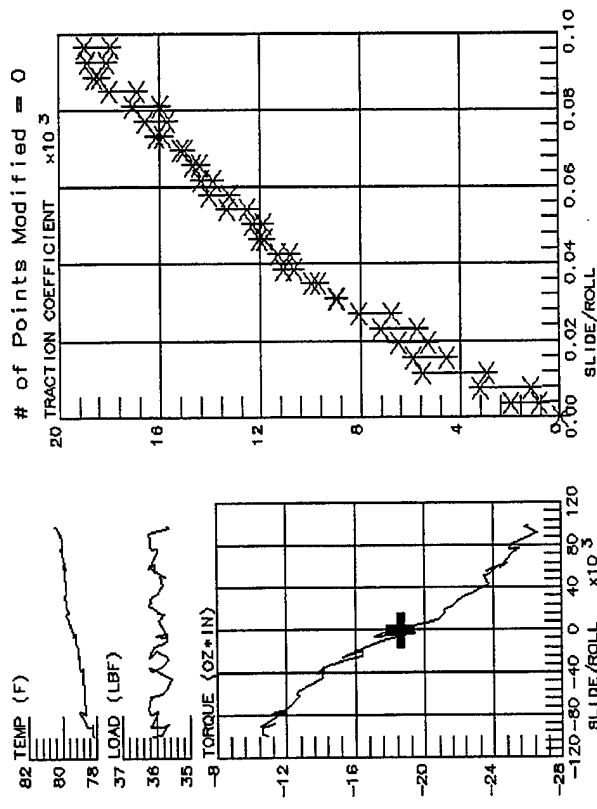
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80F 18LBF 660RPM 1 FILE: cm801

of Points Modified = 0



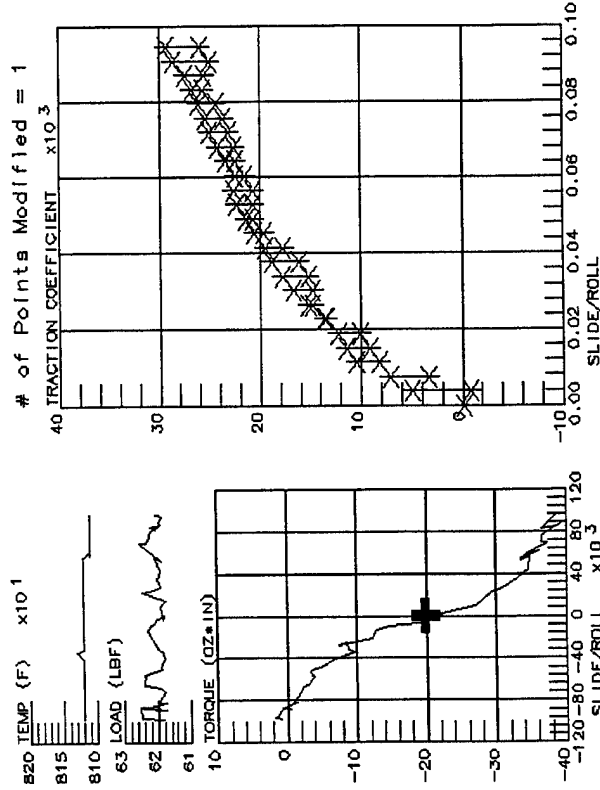
CM 93-172 PAO+16.5% 93-141 + Additives#2
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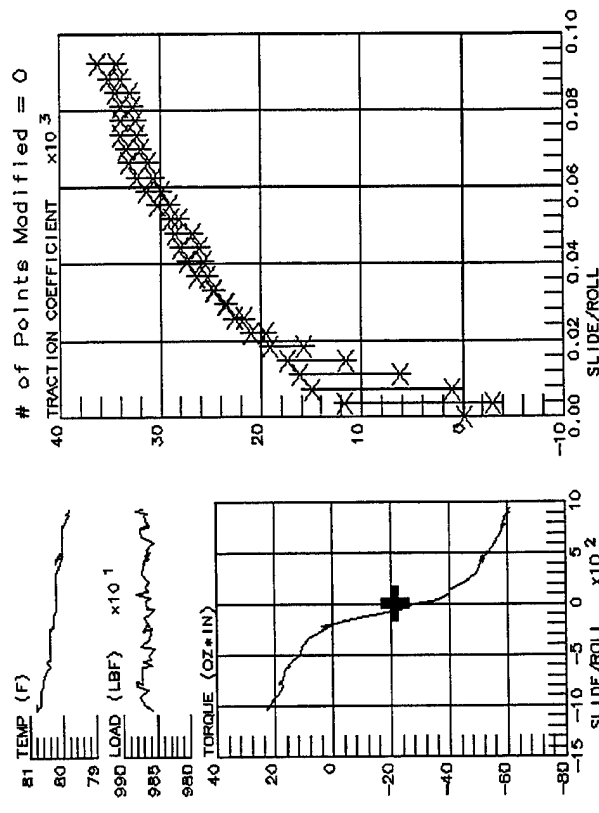
CM 93-172 PAO+16.5% 93-141 + Additives#3
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of Points Modified = 1

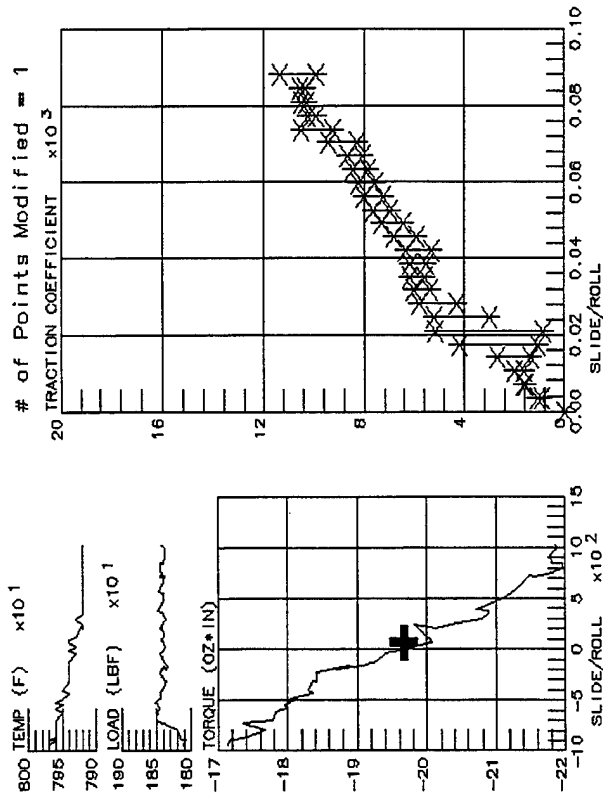


CM 93-172 PAO+16.5% 93-141 + Additives#4
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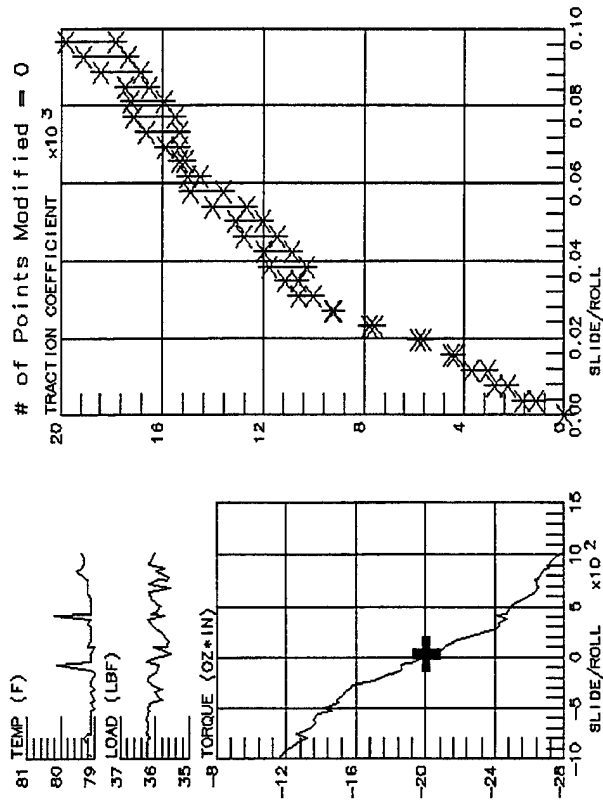
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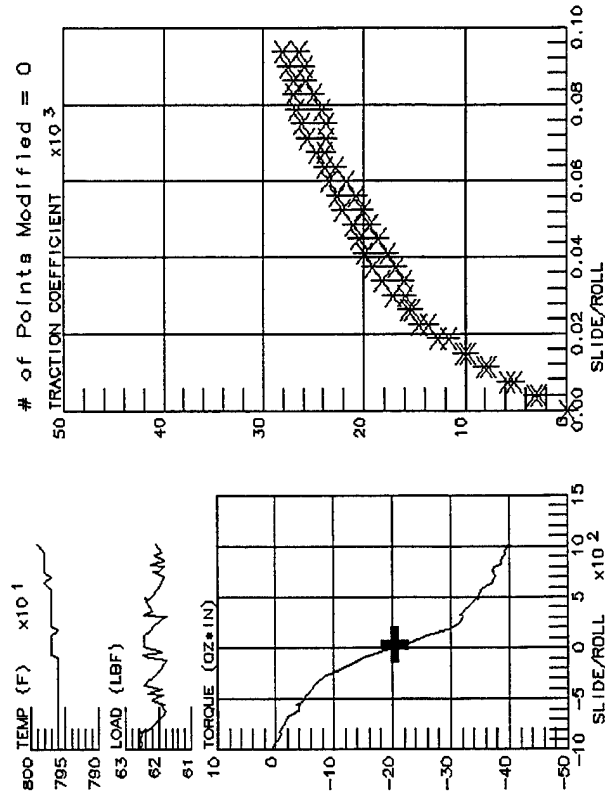
CM 93-172 PAO+16.5% 93-141 + Additives#6
80F 18LBF 1281RPM 5 FILE: cm801



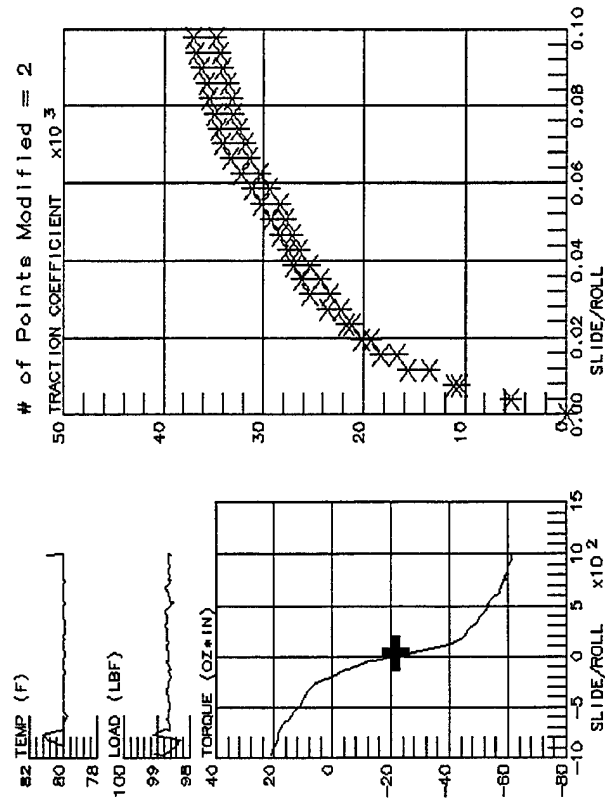
CM 93-172 PAO+16.5% 93-141 + Additives#6
80F 34LBF 1281RPM 8 FILE: cm801



CM 93-172 PAO+16.5% 93-141 + Additives#7
80F 62LBF 1281RPM 7 FILE: cm801

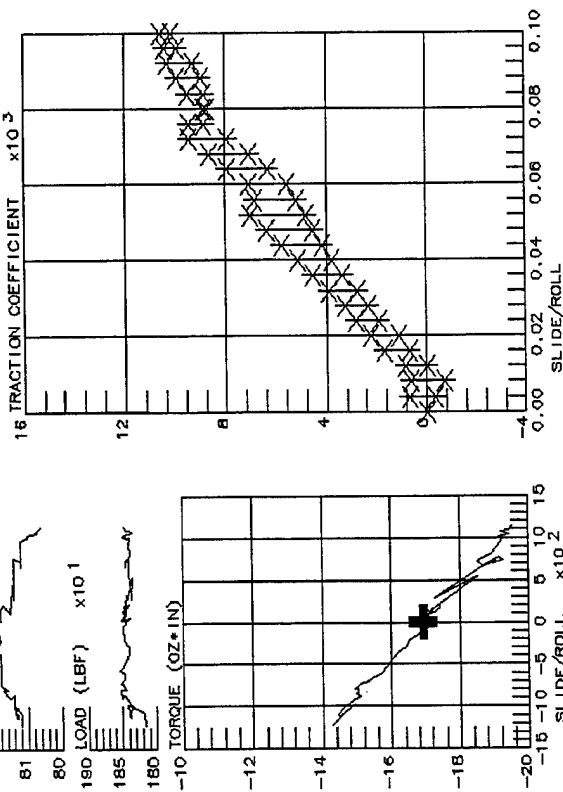


CM 93-172 PAO+16.5% 93-141 + Additives#8
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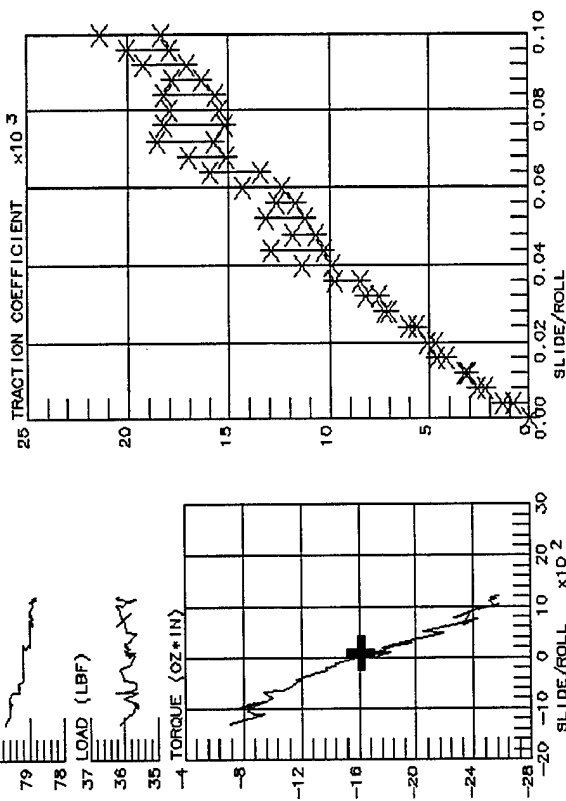
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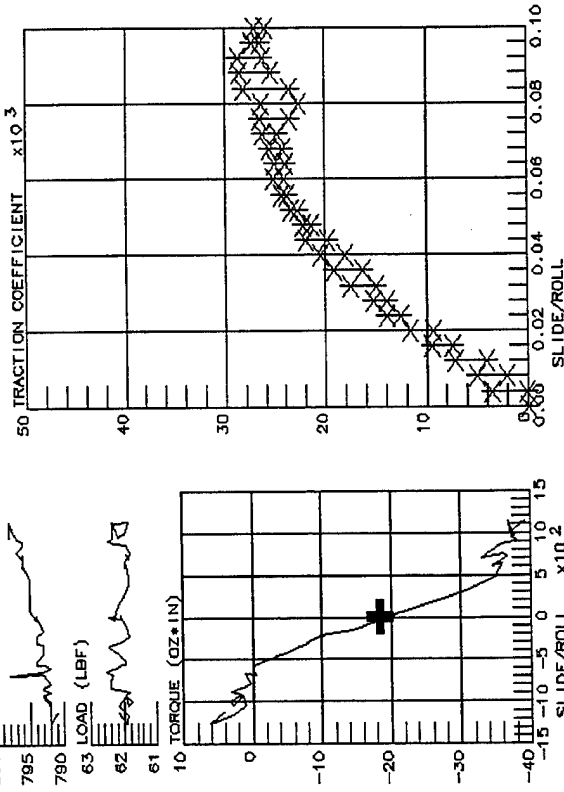
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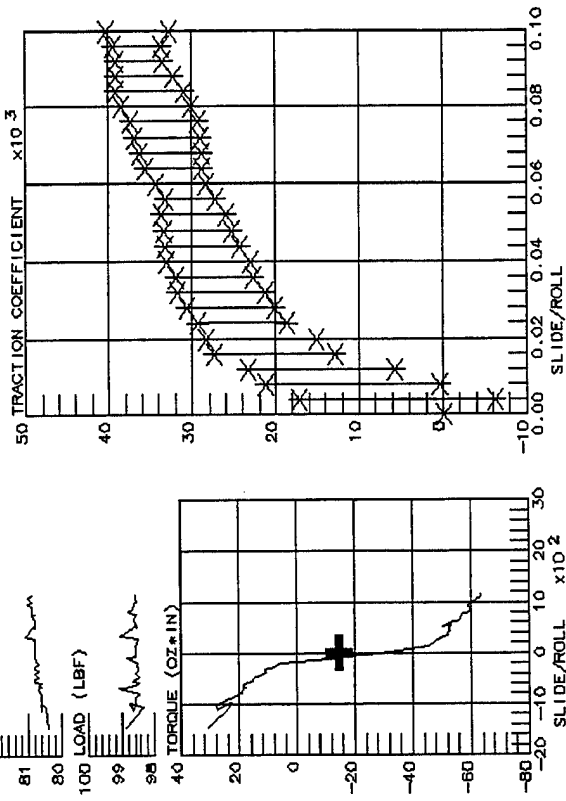
CM 93-172 PAO+16.5% 93-141 + Additives#11
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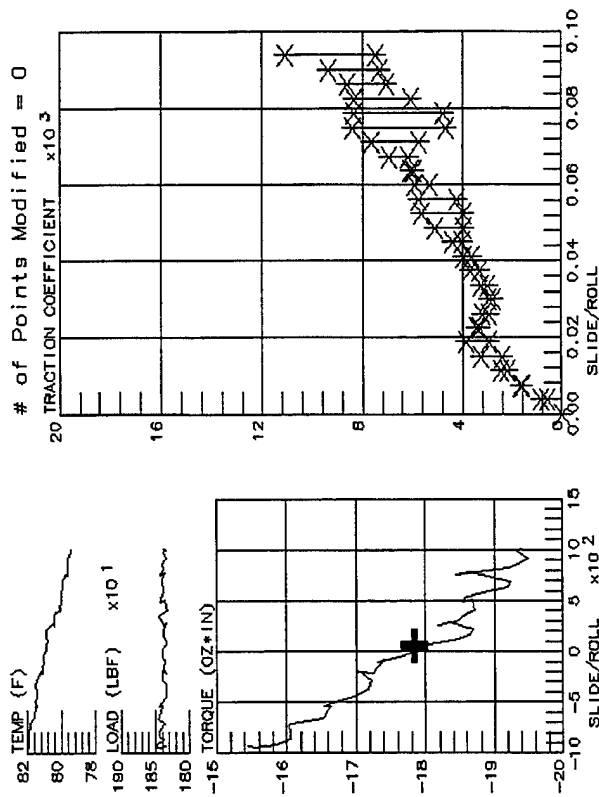


CM 93-172 PAO+16.5% 93-141 + Additives#12
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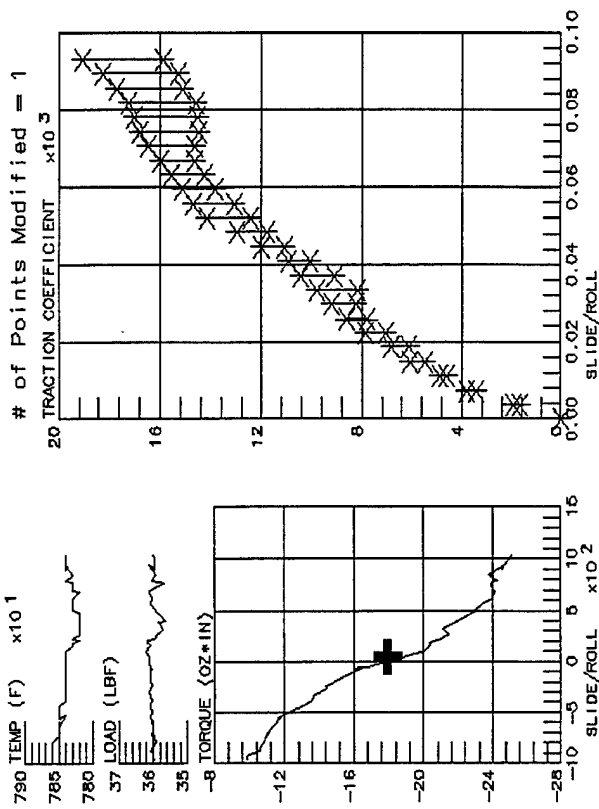
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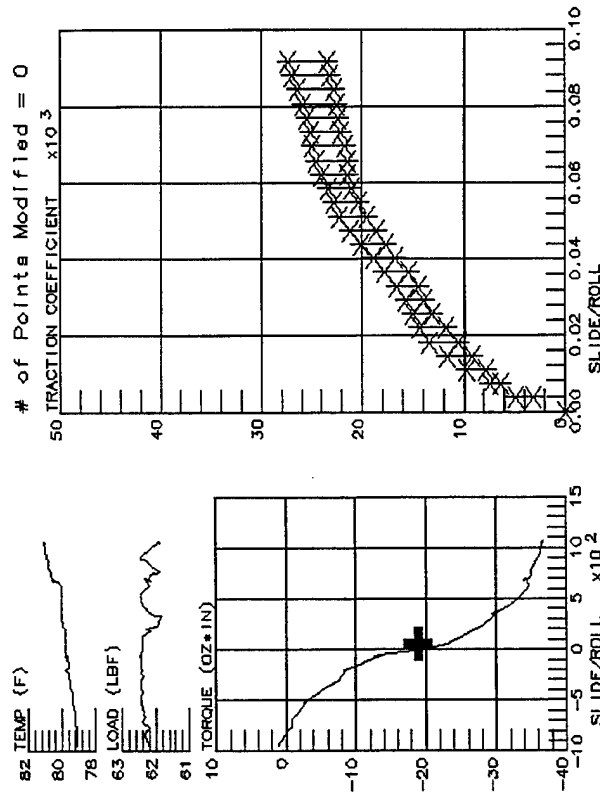
CM 93-172 PAO+16.5% 93-141 + Additives#13
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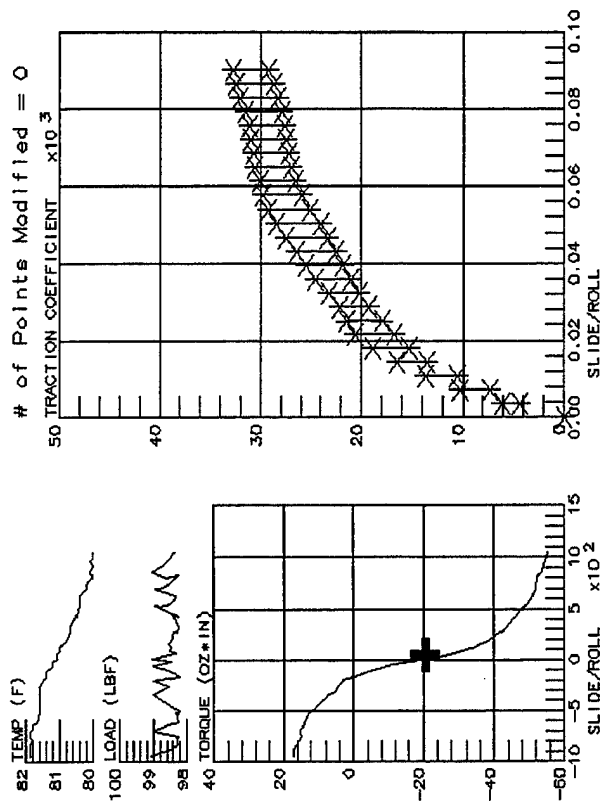
CM 93-172 PAO+16.5% 93-141 + Additives#14
80F 36LBF 2602RPM 2 FILE: cm80h



CM 93-172 PAO+16.5% 93-141 + Additives#15
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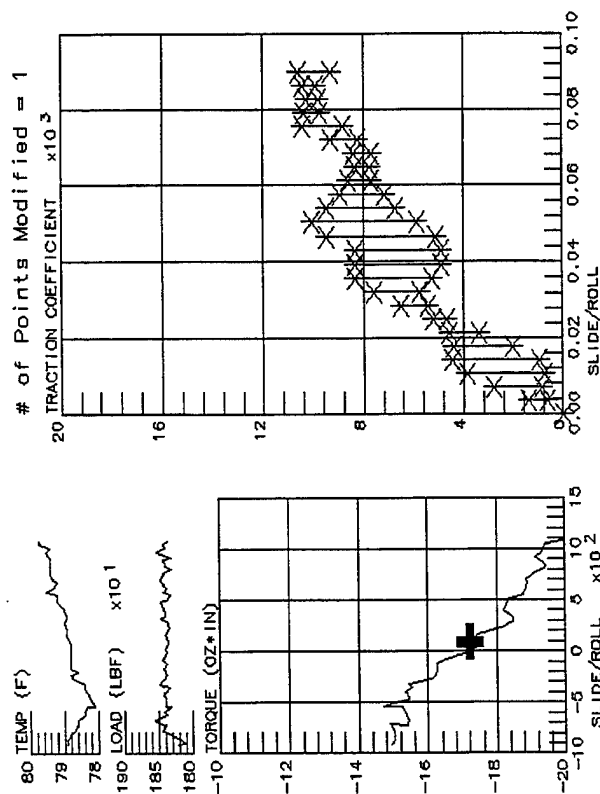


CM 93-172 PAO+16.5% 93-141 + Additives#16
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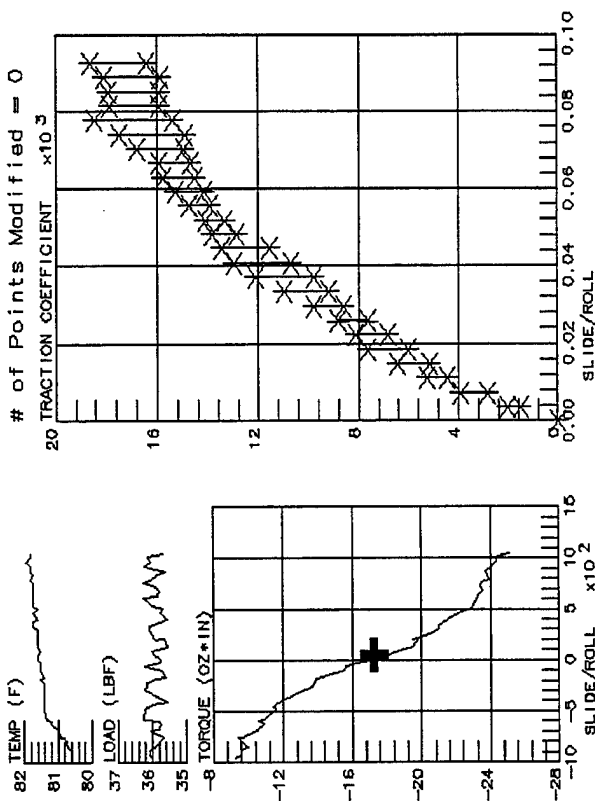
CM 93-172 PAO+16.5% 93-141 + Additives#17
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of Points Modified = 1



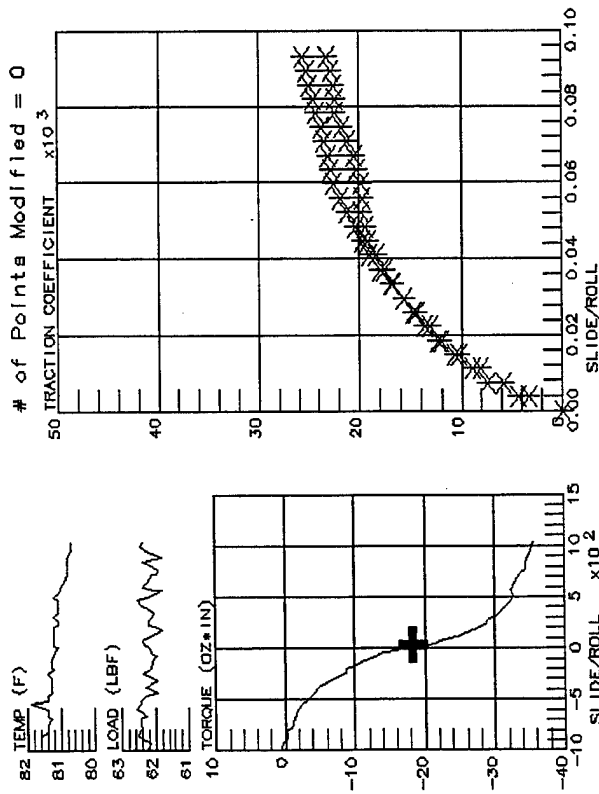
CM 93-172 PAO+16.5% 93-141 + Additives#18
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of Points Modified = 0



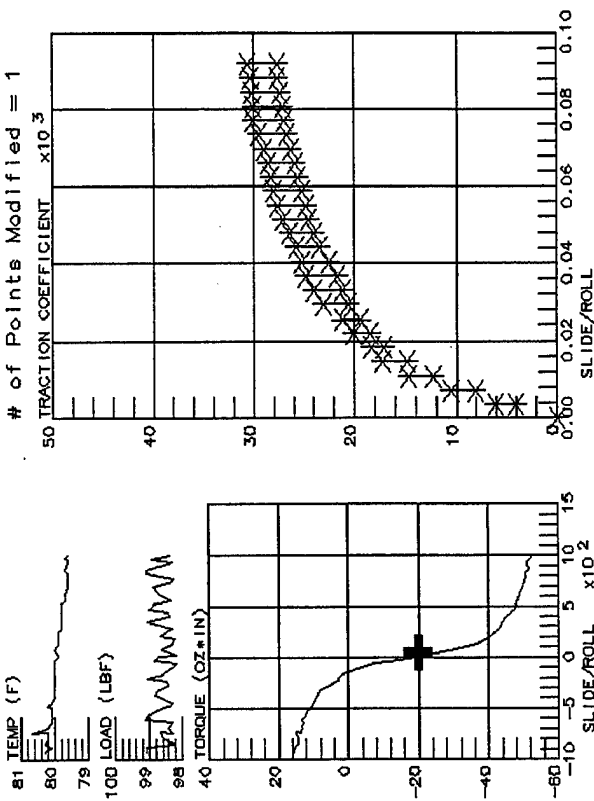
CM 93-172 PAO+16.5% 93-141 + Additives#19
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of Points Modified = 0



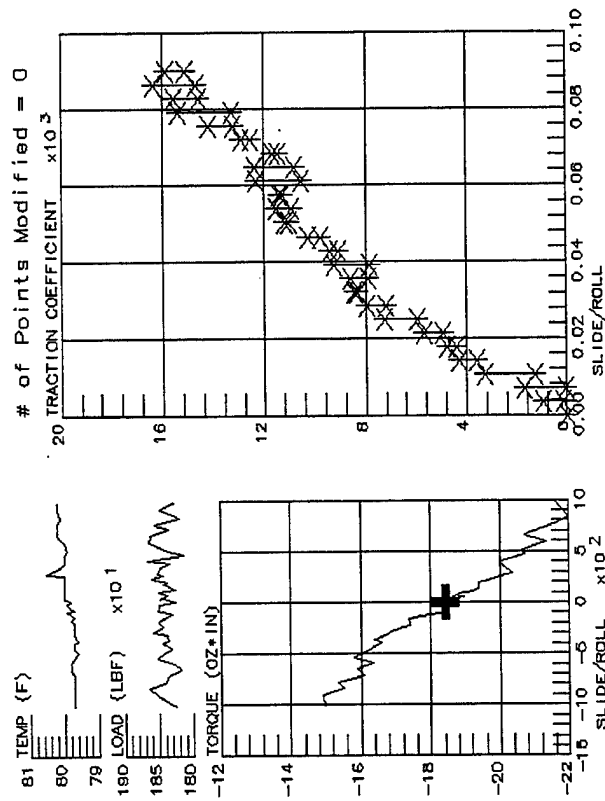
CM 93-172 PAO+16.5% 93-141 + Additives#20
80F 99LBF 5166RPM 8 FILE: cm80h

of Points Modified = 1

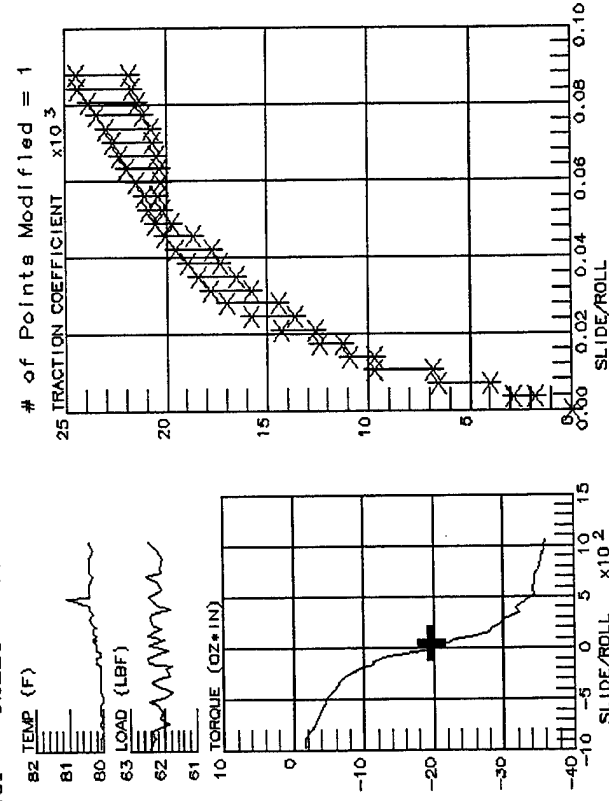


TRACTION MODELING

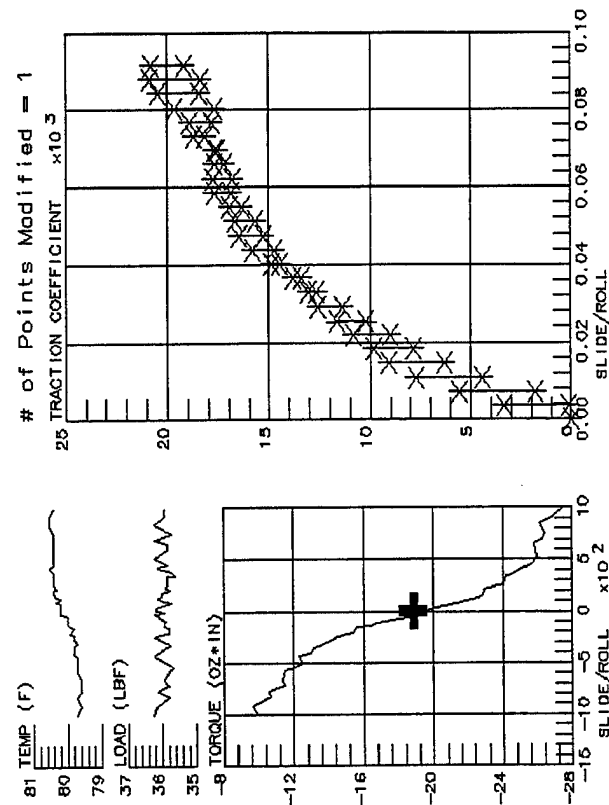
CM 93-172 PAO+16.5% 93-141 + Additives#21
80F 18LBF 7769RPM 9 FILE: cm80h



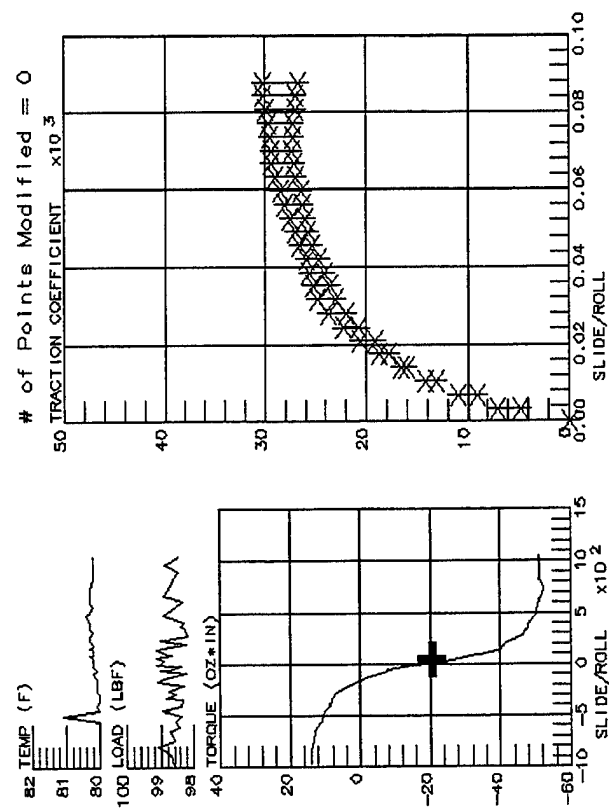
CM 93-172 PAO+16.5% 93-141 + Additives#23
80F 62LBF 7769RPM 11 FILE: cm80h



CM 93-172 PAO+16.5% 93-141 + Additives#22
80F 36LBF 7769RPM 10 FILE: cm80h

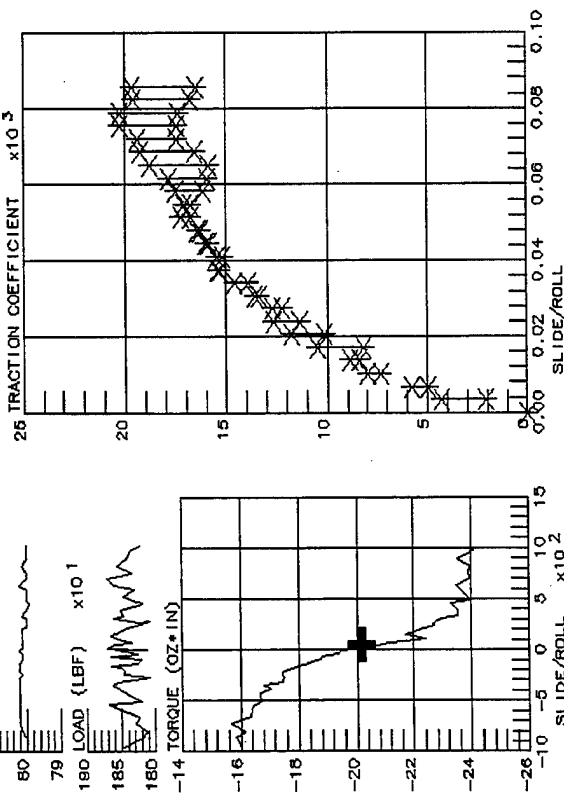


CM 93-172 PAO+16.5% 93-141 + Additives#24
80F 99LBF 7769RPM 12 FILE: cm80h



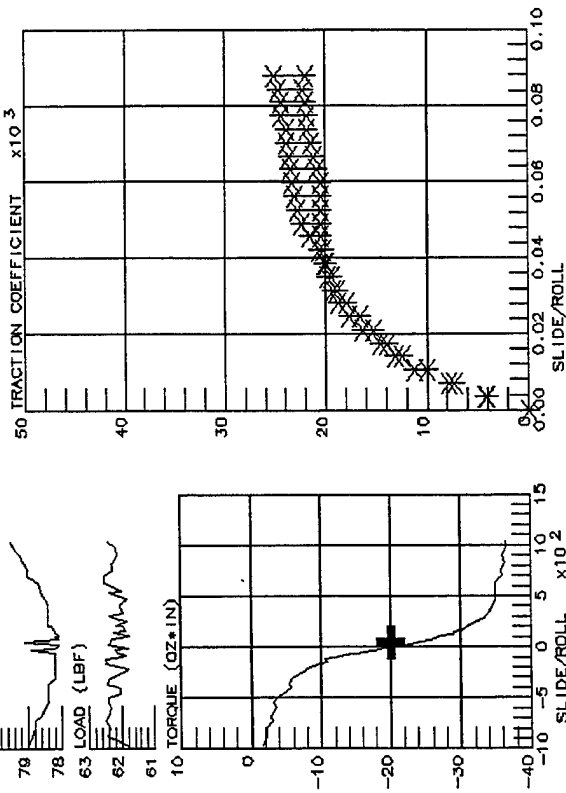
CM 93-172 PAO+16.5% 93-141 + Additives#25
80F 18LBF 10371RPM 13 FILE: cm80h

of Points Modified = 1



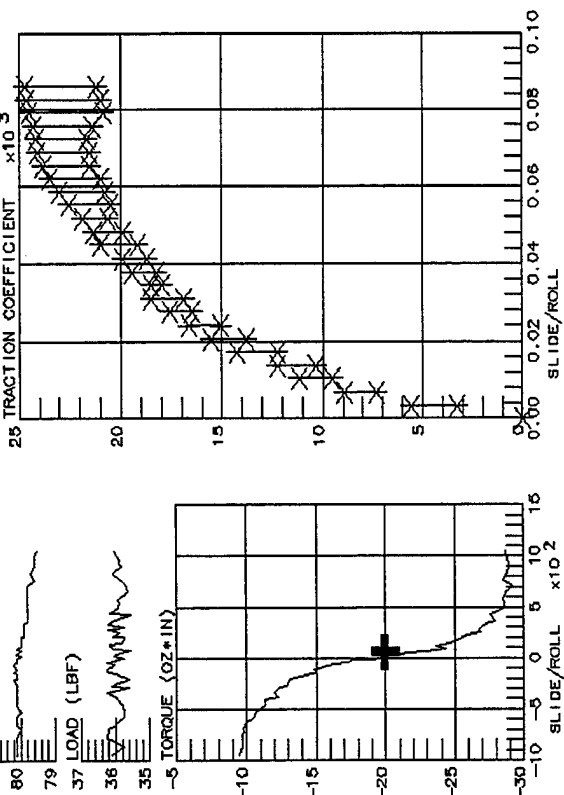
CM 93-172 PAO+16.5% 93-141 + Additives#27
80F 62LBF 10371RPM 15 FILE: cm80h

of Points Modified = 2



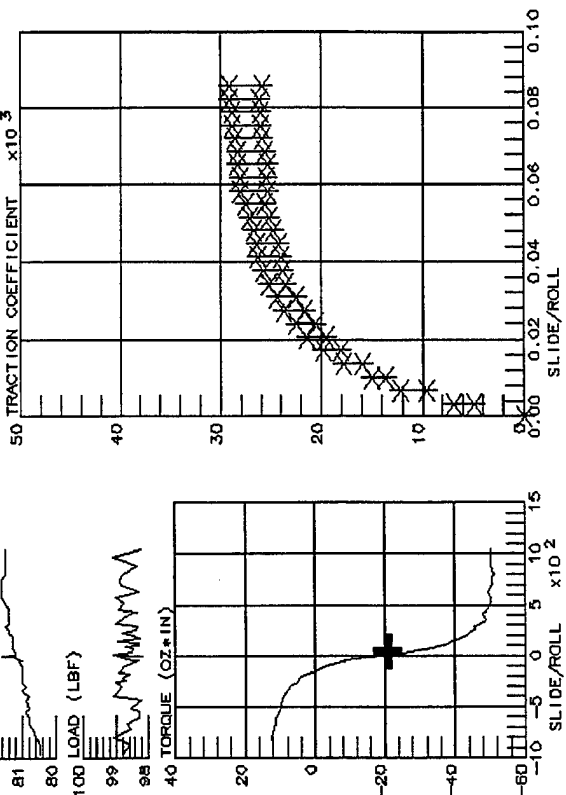
CM 93-172 PAO+16.5% 93-141 + Additives#28
80F 36LBF 10371RPM 14 FILE: cm80h

of Points Modified = 1

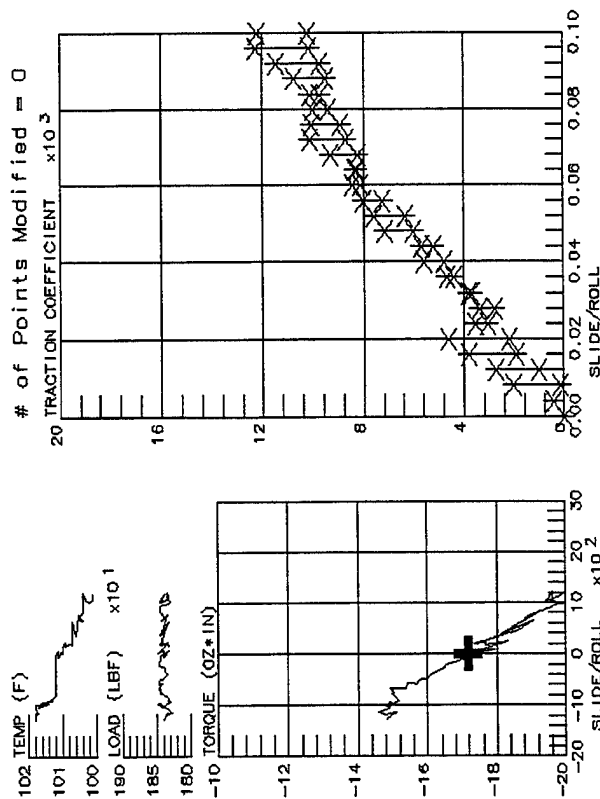


CM 93-172 PAO+16.5% 93-141 + Additives#28
80F 99LBF 10371RPM 16 FILE: cm80h

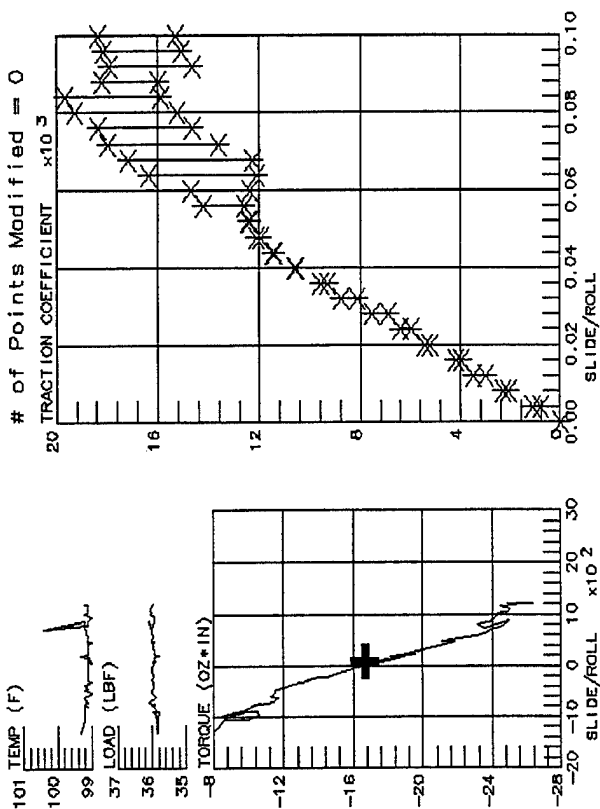
of Points Modified = 0



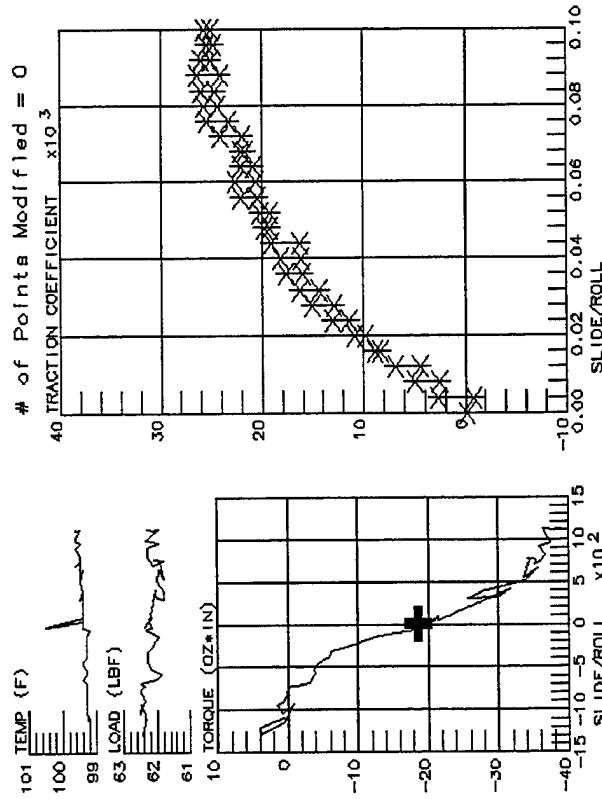
CM 93-172 PAO+16.5% 93-141 + Additives#29
100F 18LBF 310RPM 1 FILE: cm1001



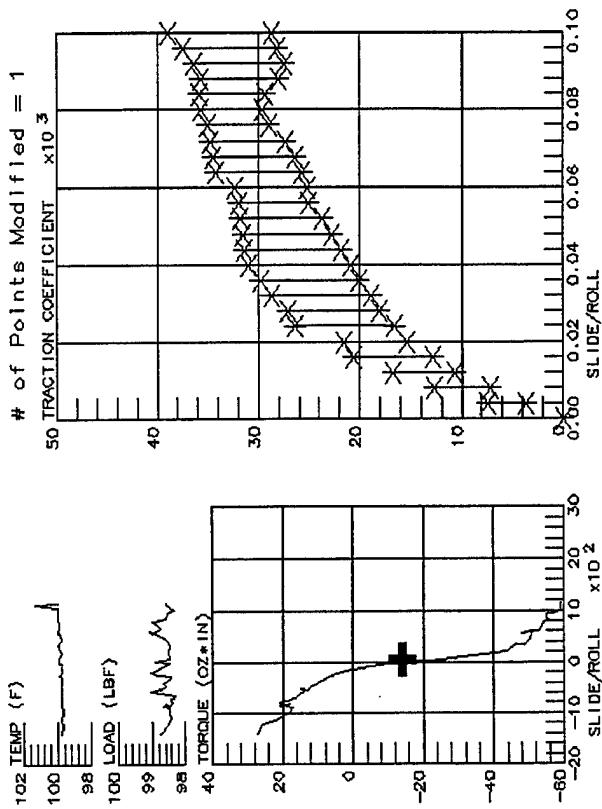
CM 93-172 PAO+16.5% 93-141 + Additives#30
100F 36LBF 310RPM 2 FILE: cm1001



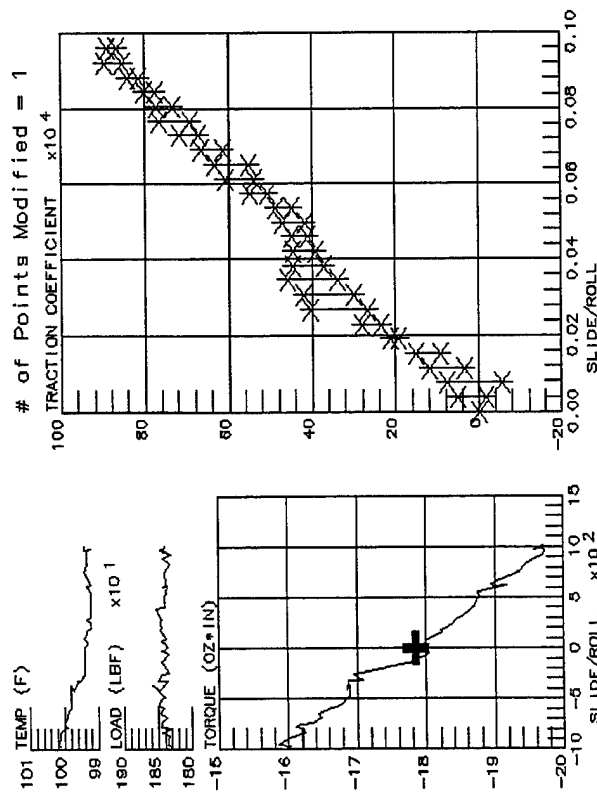
CM 93-172 PAO+16.5% 93-141 + Additives#31
100F 62LBF 310RPM 3 FILE: cm1001



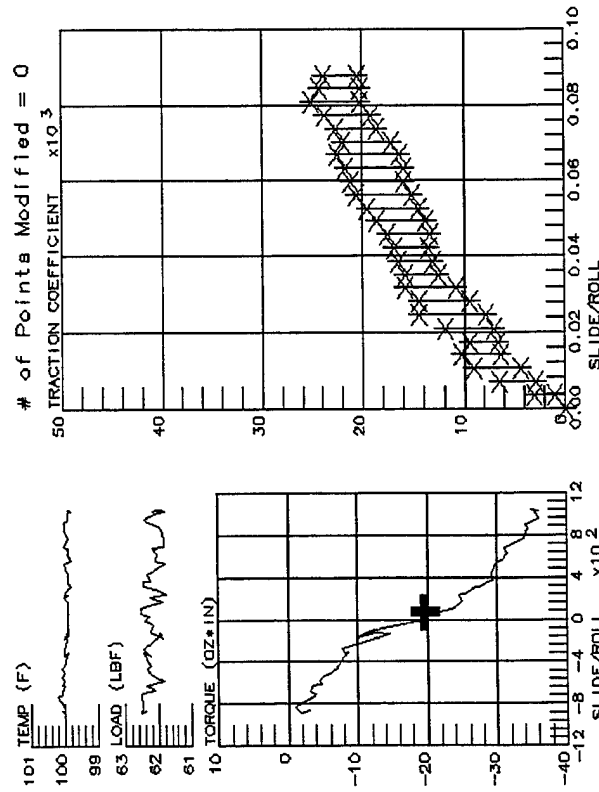
CM 93-172 PAO+16.5% 93-141 + Additives#32
100F 99LBF 310RPM 4 FILE: cm1001



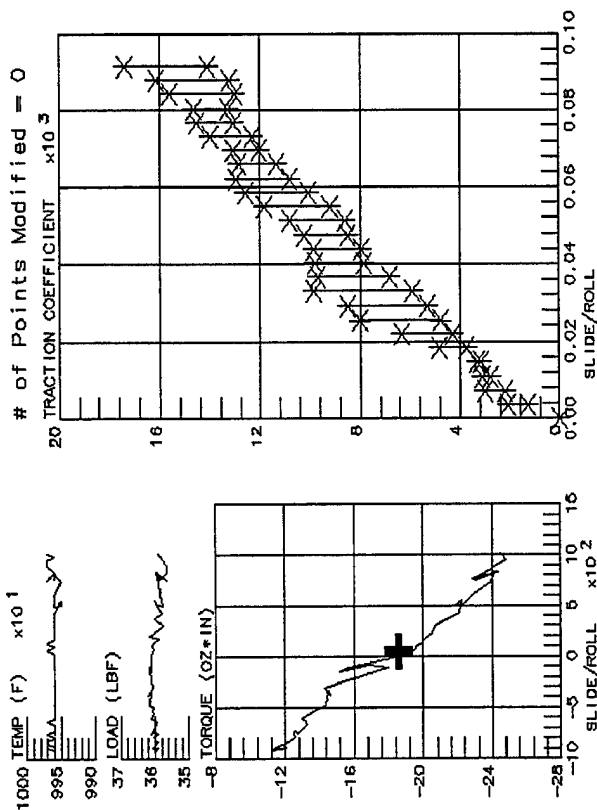
CM 93-172 PAO+16.5% 93-141 + Additives#33
100F 18LBF 660RPM 5 FILE: cm1001



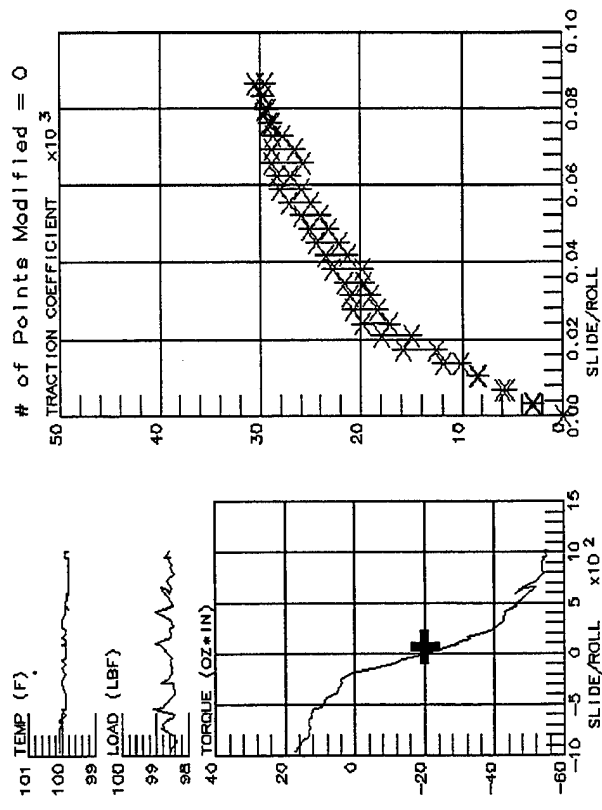
CM 93-172 PAO+16.5% 93-141 + Additives#35
100F 62LBF 660RPM 7 FILE: cm1001



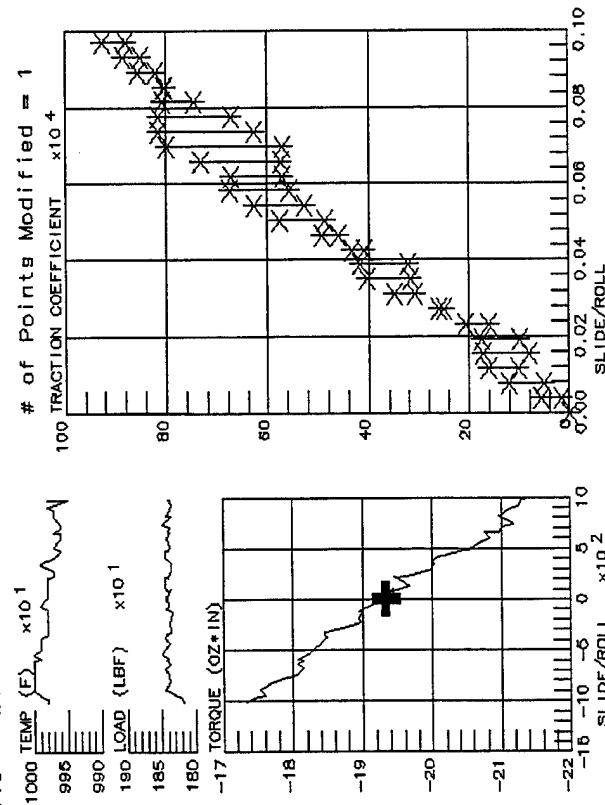
CM 93-172 PAO+16.5% 93-141 + Additives#34
100F 36LBF 660RPM 6 FILE: cm1001



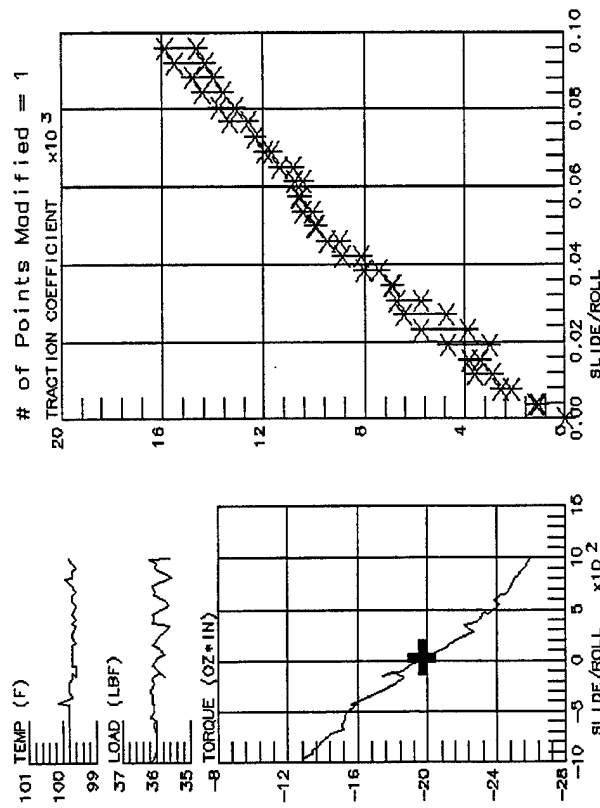
CM 93-172 PAO+16.5% 93-141 + Additives#36
100F 99LBF 660RPM 8 FILE: cm1001



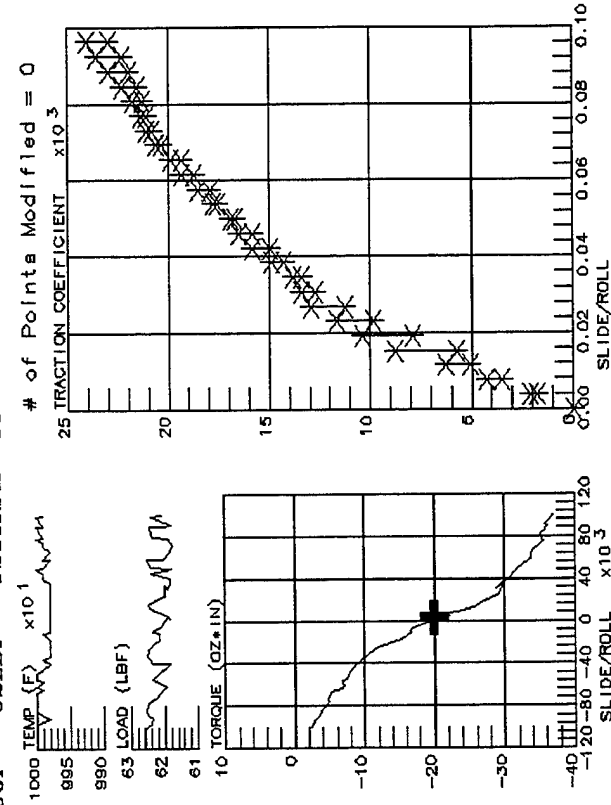
CM 93-172 PAO+16.5% 93-141 + Additives#37
100F 18LBF 1281RPM 9 FILE: cm1001



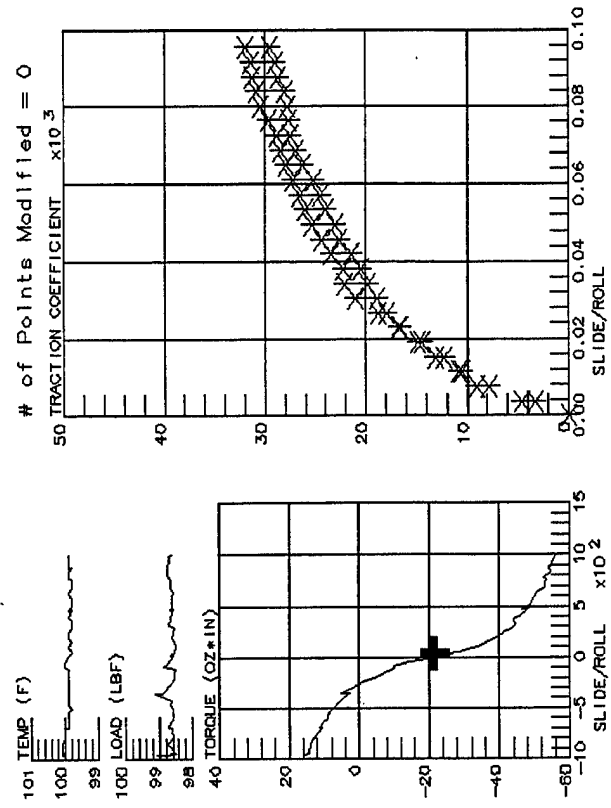
CM 93-172 PAO+16.5% 93-141 + Additives#38
100F 36LBF 1281RPM 10 FILE: cm1001



CM 93-172 PAO+16.5% 93-141 + Additives#39
100F 62LBF 1281RPM 11 FILE: cm1001

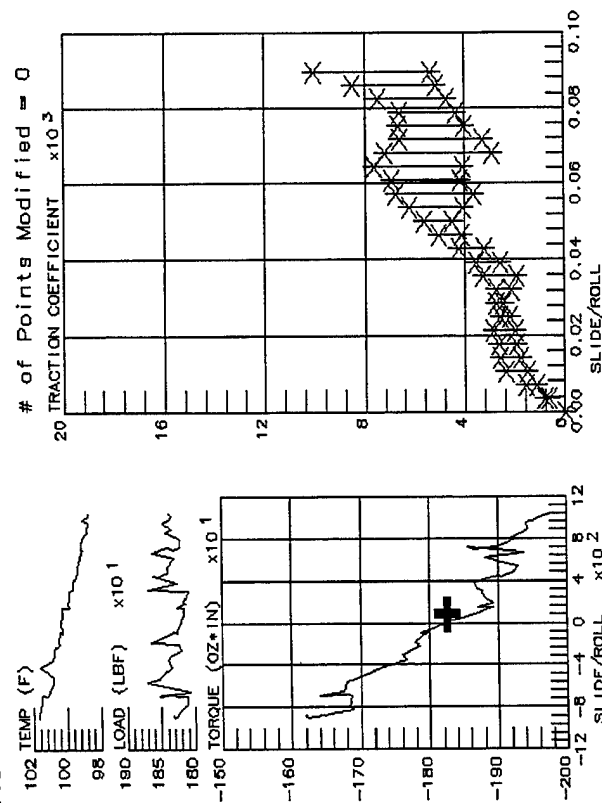


CM 93-172 PAO+16.5% 93-141 + Additives#40
100F 99LBF 1281RPM 12 FILE: cm1001



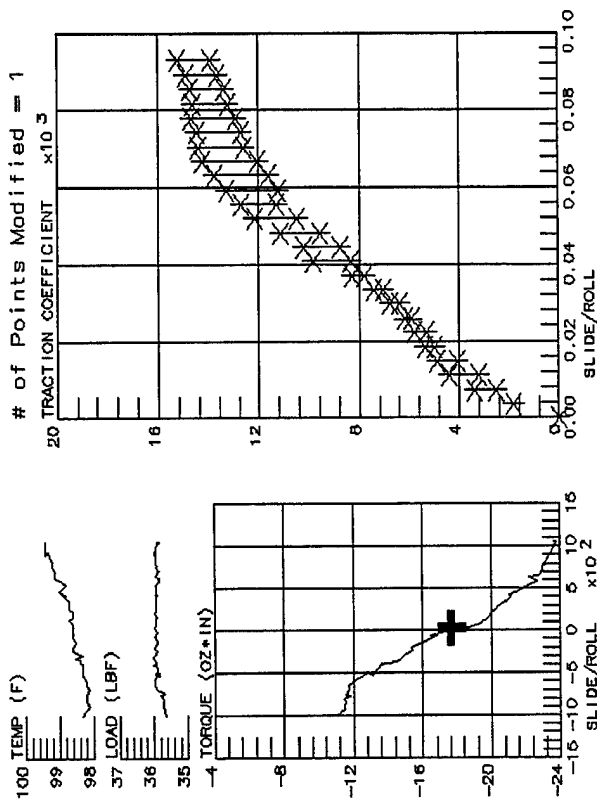
CM 93-172 PAO+16.5% 93-141 + Additives#41
100F 18LBF 2602RPM 1 FILE: cm100h

of Points Modified = 0



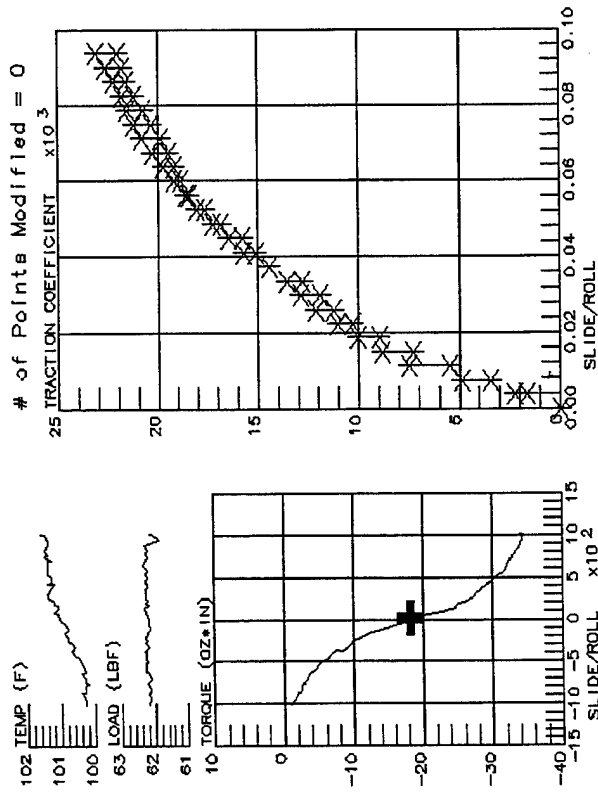
CM 93-172 PAO+16.5% 93-141 + Additives#42
100F 36LBF 2602RPM 2 FILE: cm100h

of Points Modified = 1



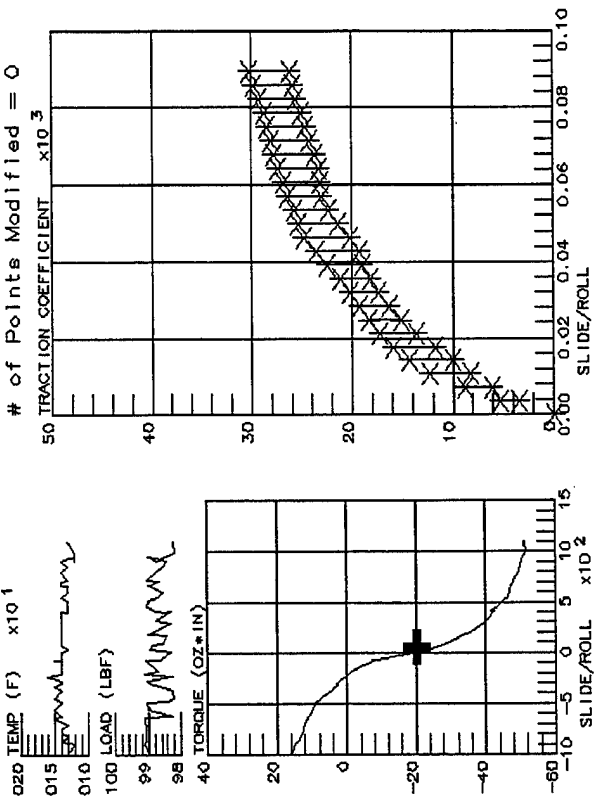
CM 93-172 PAO+16.5% 93-141 + Additives#43
100F 62LBF 2602RPM 3 FILE: cm100h

of Points Modified = 0

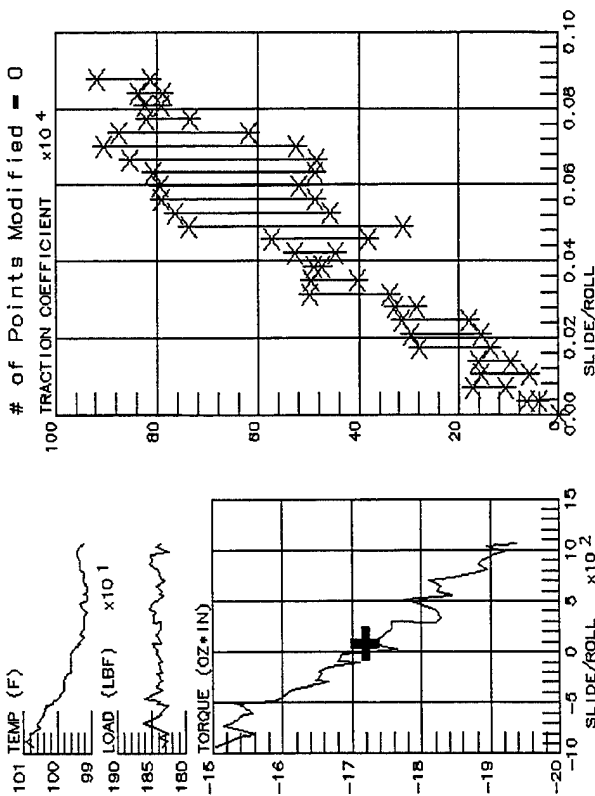


CM 93-172 PAO+16.5% 93-141 + Additives#44
100F 99LBF 2602RPM 4 FILE: cm100h

of Points Modified = 0



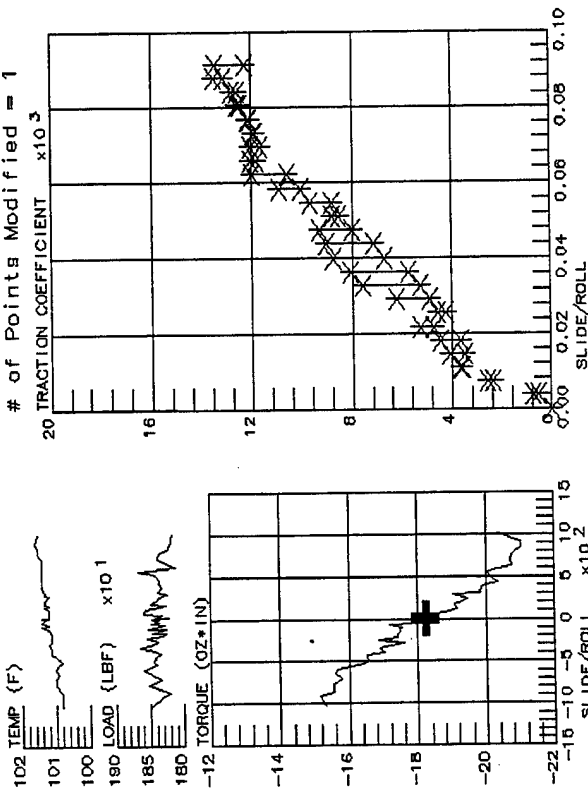
CM 93-172 PAO+16.5% 93-141 + Additives#45
100F 18LBF 516RPM 5 FILE: cm100h



TRACTION MODULUS

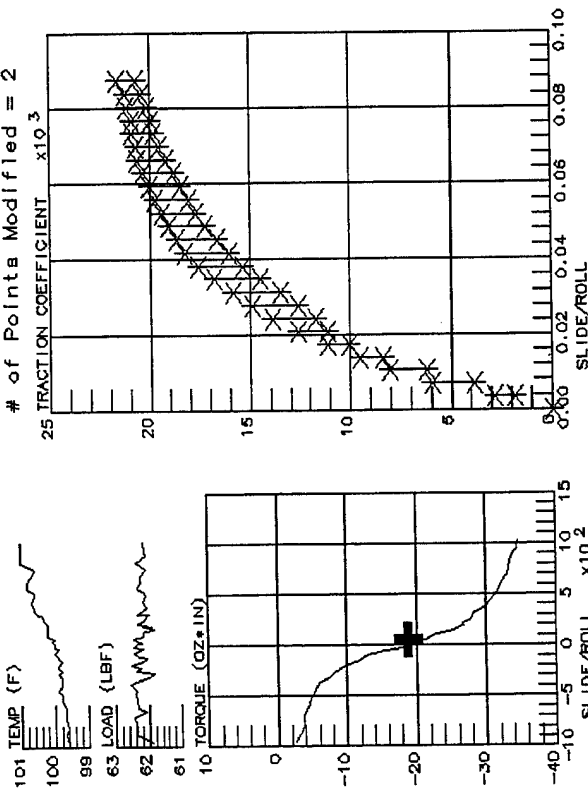
CM 93-172 PAO+16.5% 93-141 + Additives#49
100F 18LBF 7769RPM 9 FILE: cm100h

of Points Modified = 1



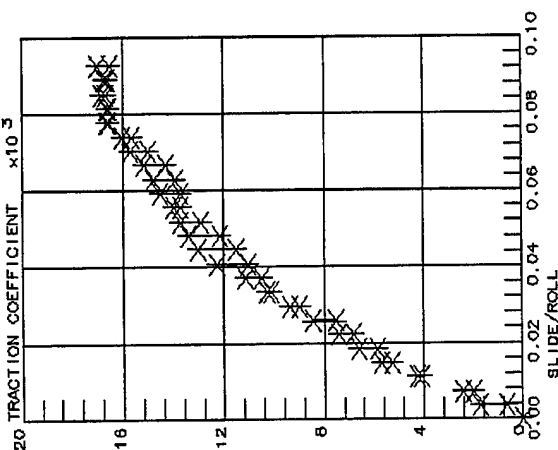
CM 93-172 PAO+16.5% 93-141 + Additives#51
100F 62LBF 7769RPM 11 FILE: cm100h

of Points Modified = 2



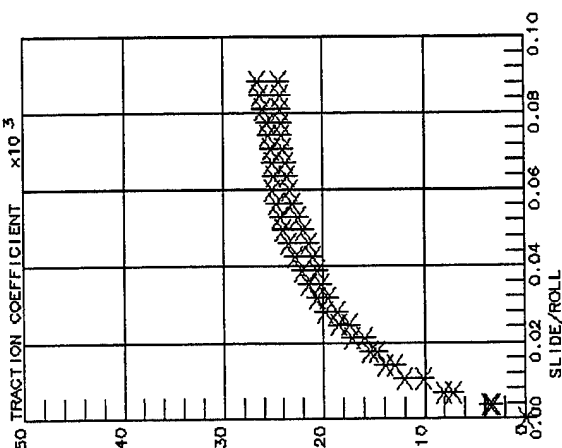
CM 93-172 PAO+16.5% 93-141 + Additives#50
100F 36LBF 7769RPM 10 FILE: cm100h

of Points Modified = 1

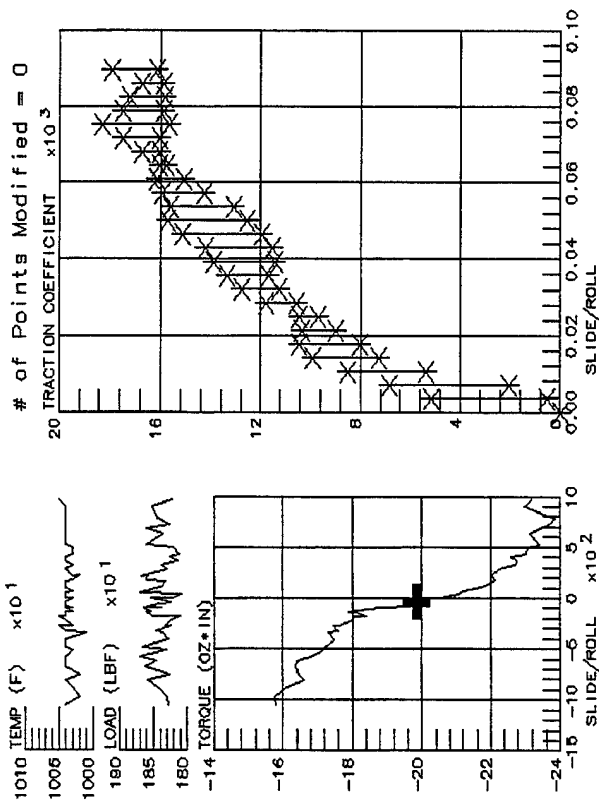


CM 93-172 PAO+16.5% 93-141 + Additives#52
100F 99LBF 7769RPM 12 FILE: cm100h

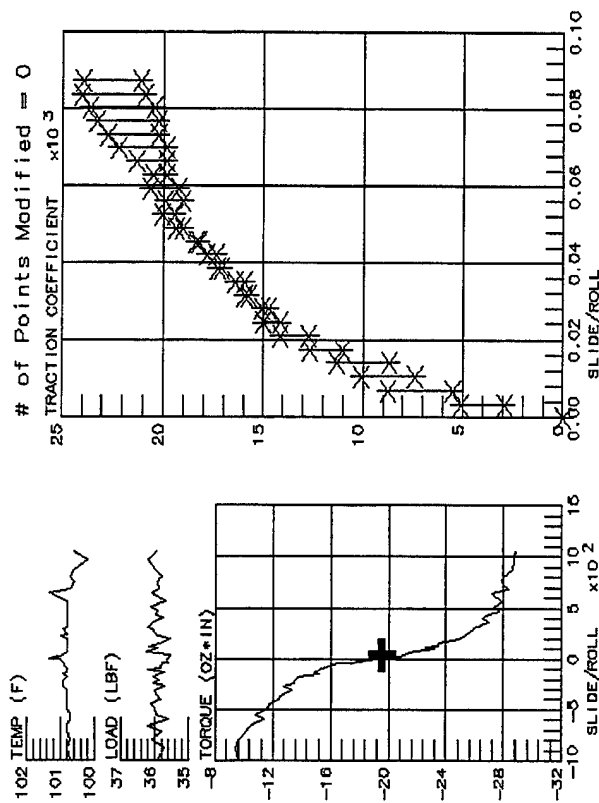
of Points Modified = 1



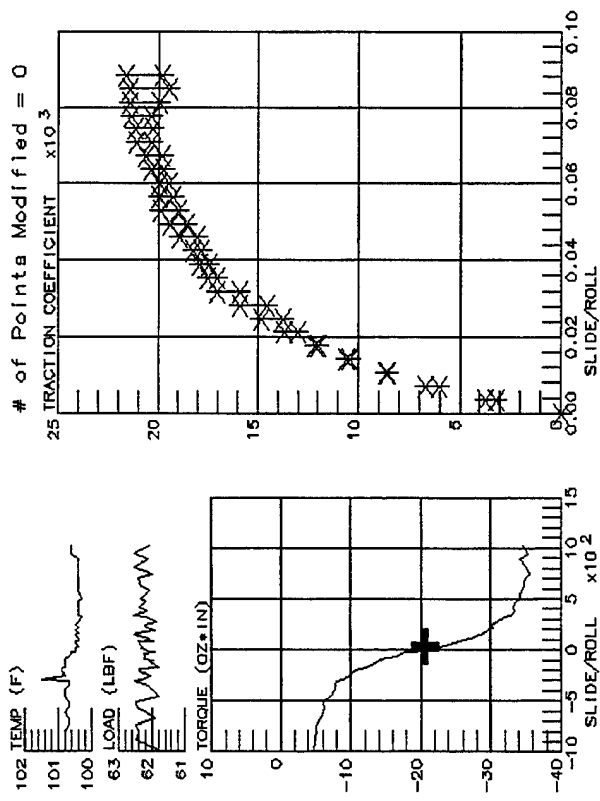
CM 93-172 PAO+16.5% 93-141 + Additives#53
100F 18LBF 10371RPM 13 FILE: cm100h



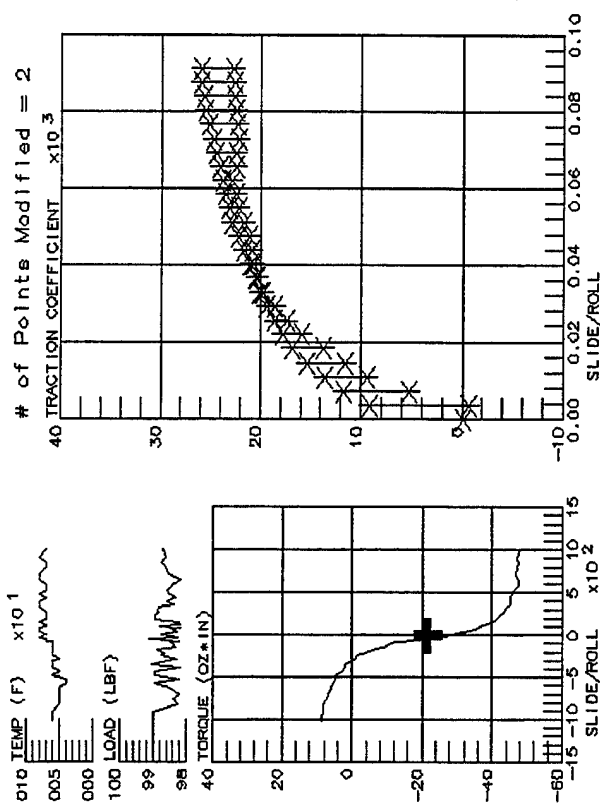
CM 93-172 PAO+16.5% 93-141 + Additives#54
100F 38LBF 10371RPM 14 FILE: cm100h



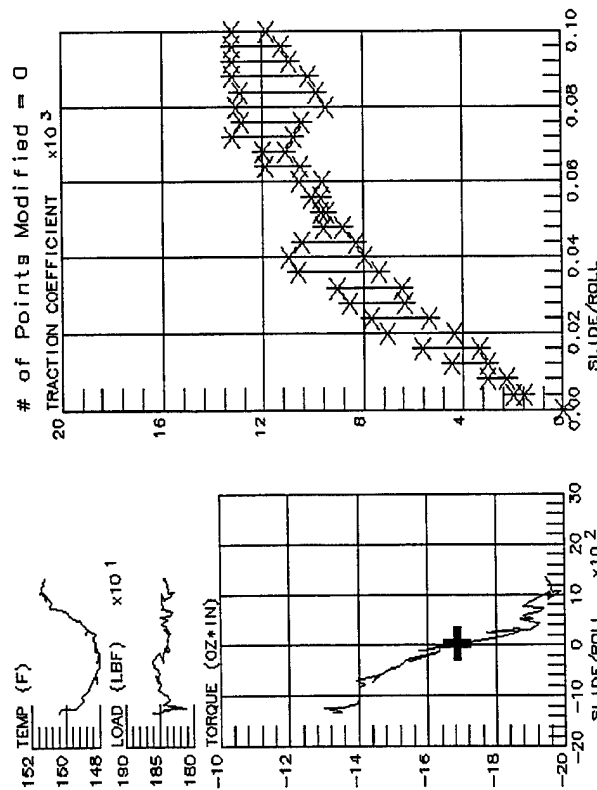
CM 93-172 PAO+16.5% 93-141 + Additives#55
100F 62LBF 10371RPM 15 FILE: cm100h



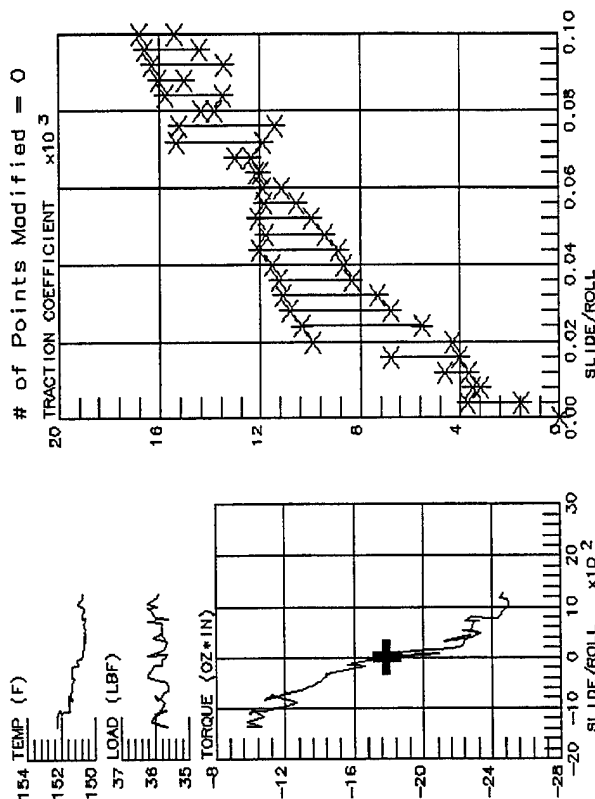
CM 93-172 PAO+16.5% 93-141 + Additives#56
100F 99LBF 10371RPM 16 FILE: cm100h



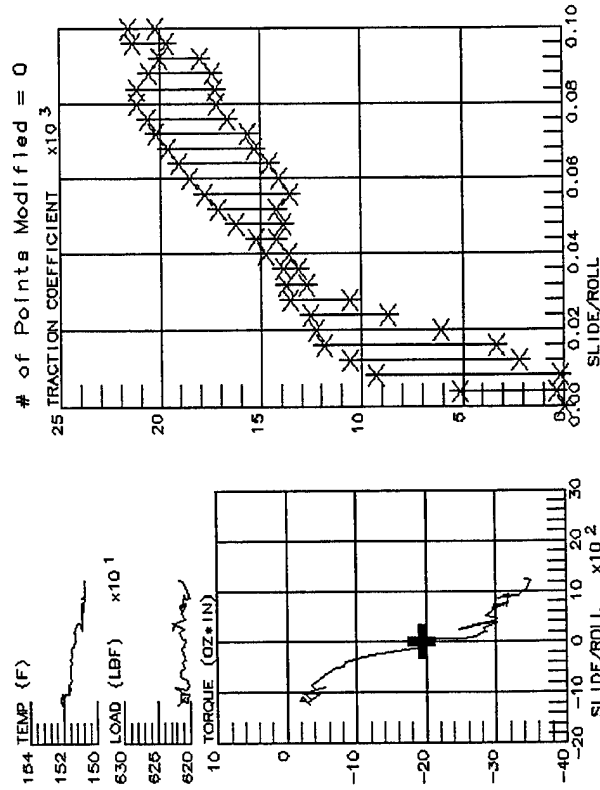
CM 93-172 PAO+16.5% 93-141 + Additives#57
150F 18LBF 310RPM 1 FILE: cm1501



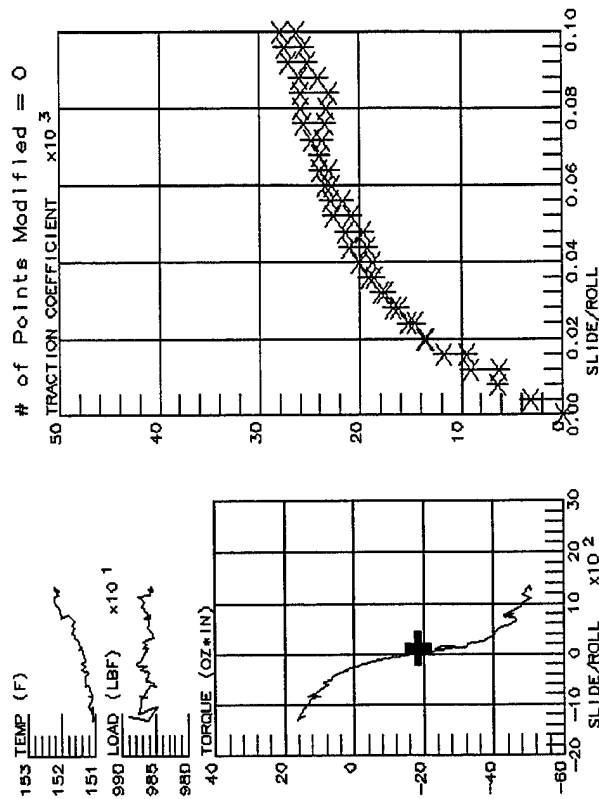
CM 93-172 PAO+16.5% 93-141 + Additives#68
150F 36LBF 310RPM 2 FILE: cm1501



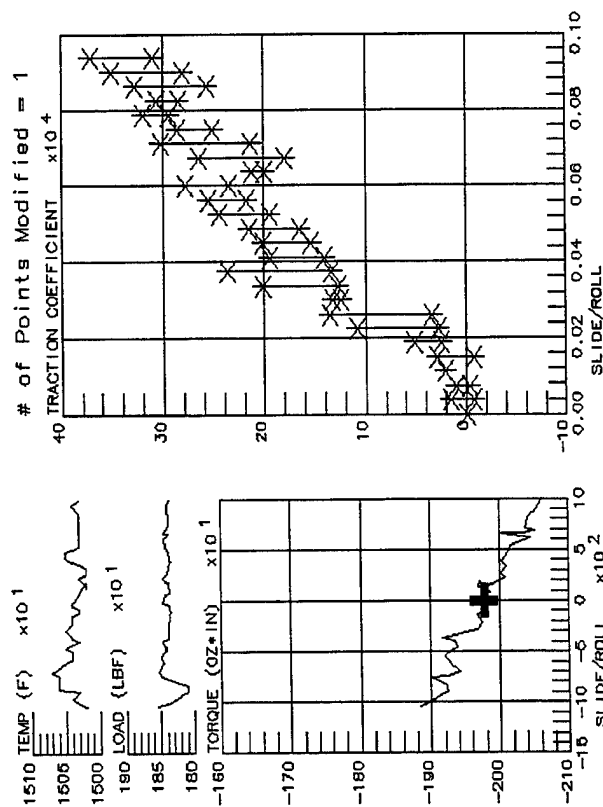
CM 93-172 PAO+16.5% 93-141 + Additives#59
150F 62LBF 310RPM 3 FILE: cm1501



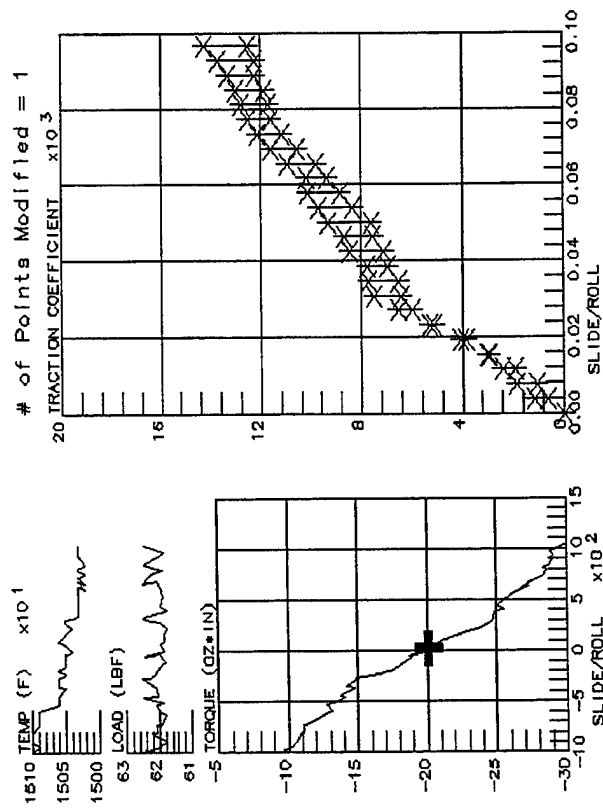
CM 93-172 PAO+16.5% 93-141 + Additives#60
150F 99LBF 310RPM 4 FILE: cm1501



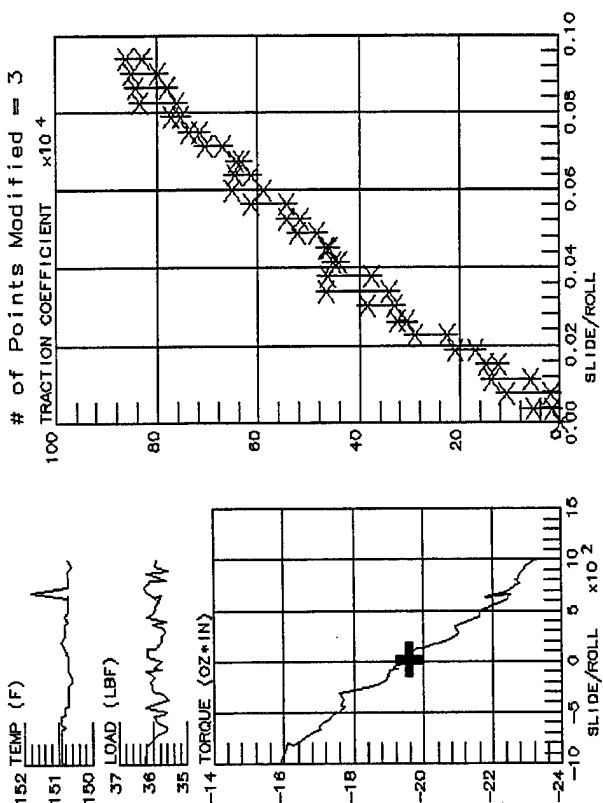
CM 93-172 PAO+16.5% 93-141 + Additives#65
150F 18LBF 1281RPM 9 FILE: cm1501



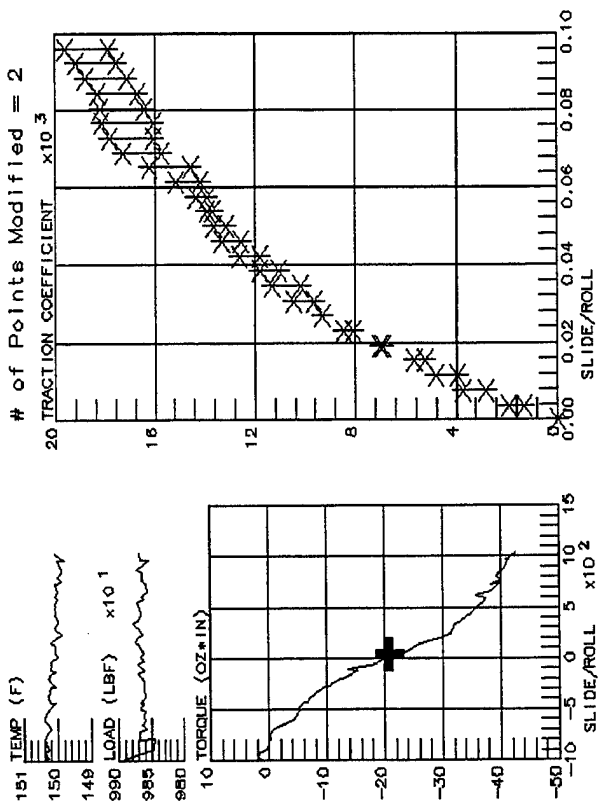
CM 93-172 PAO+16.5% 93-141 + Additives#67
150F 62LBF 1281RPM 11 FILE: cm1501



CM 93-172 PAO+16.5% 93-141 + Additives#68
150F 36LBF 1281RPM 10 FILE: cm1501

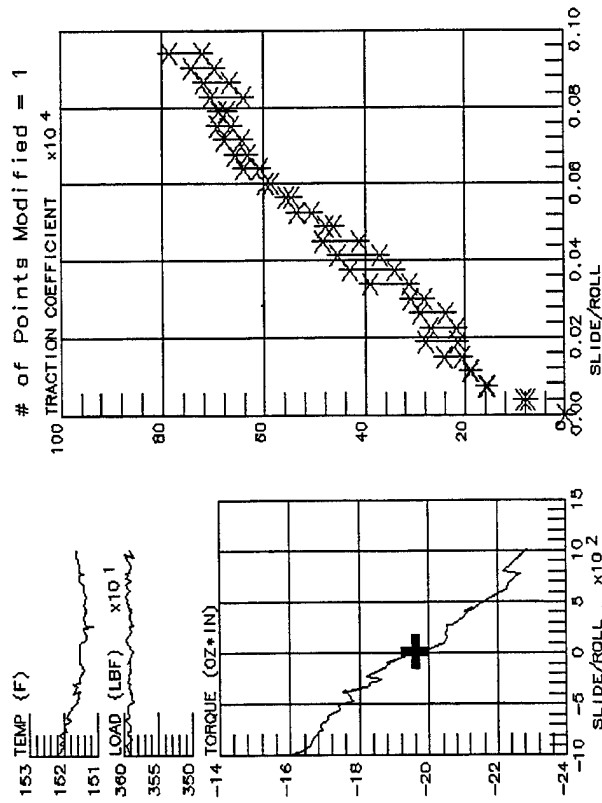


CM 93-172 PAO+16.5% 93-141 + Additives#68
150F 99LBF 1281RPM 12 FILE: cm1501

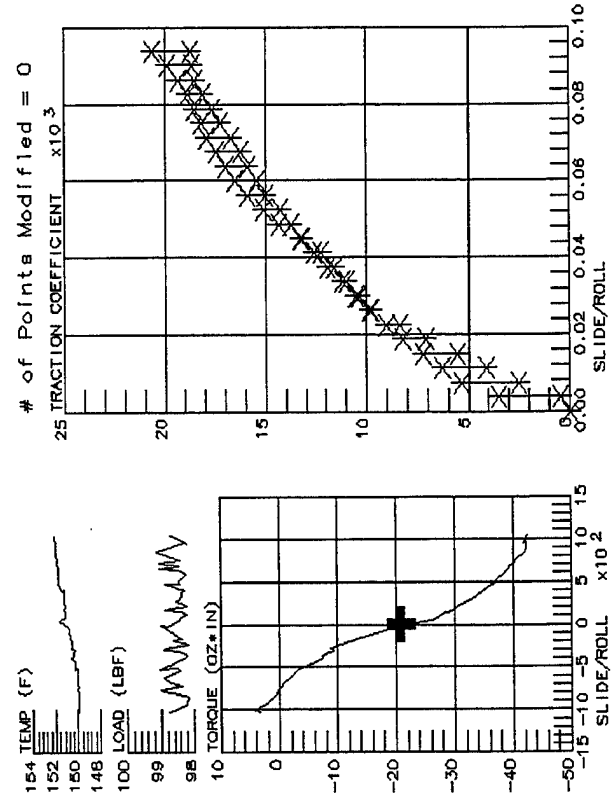


TRACTION MODELING

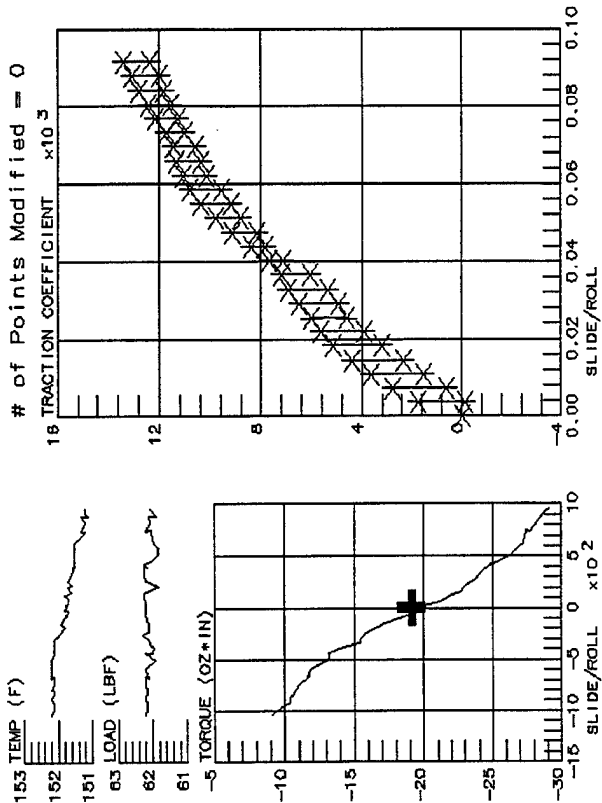
CM 93-172 PAO+16.5% 93-141 + Additives#89
150F 36LBF 2602RPM 1 FILE: cm150h



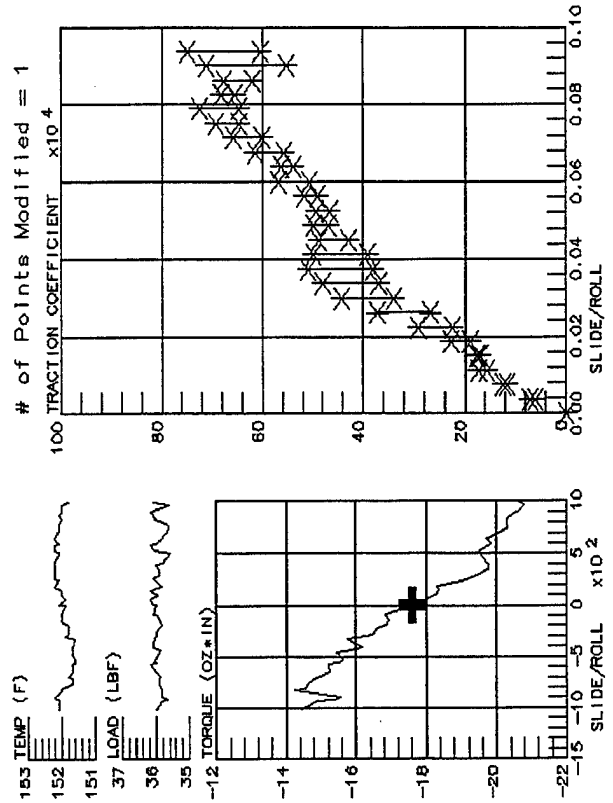
CM 93-172 PAO+16.5% 93-141 + Additives#71
150F 99LBF 2602RPM 3 FILE: cm150h



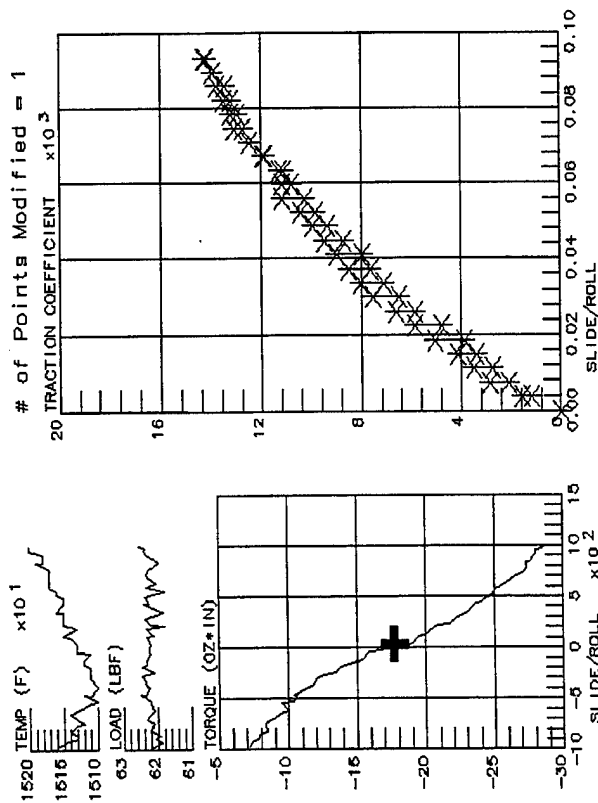
CM 93-172 PAO+16.5% 93-141 + Additives#70
150F 62LBF 2602RPM 2 FILE: cm150h



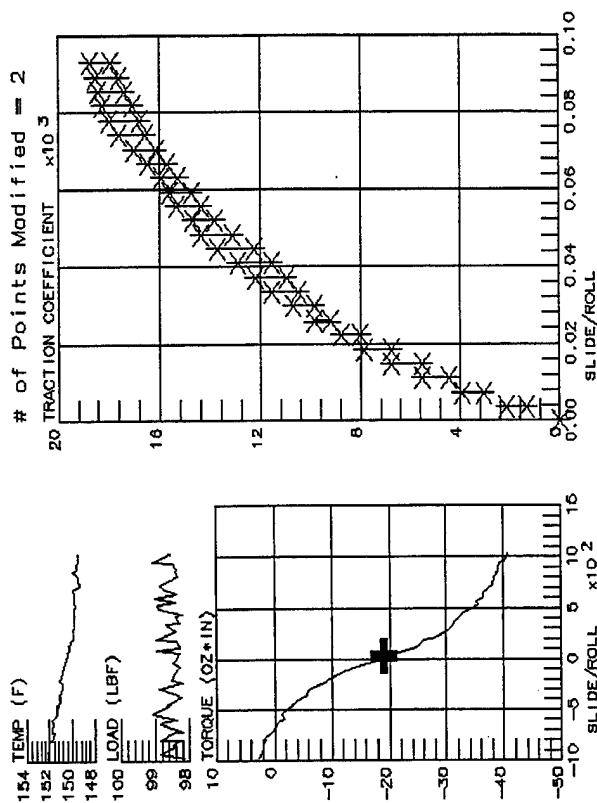
CM 93-172 PAO+16.5% 93-141 + Additives#72
150F 36LBF 5166RPM 4 FILE: cm150h



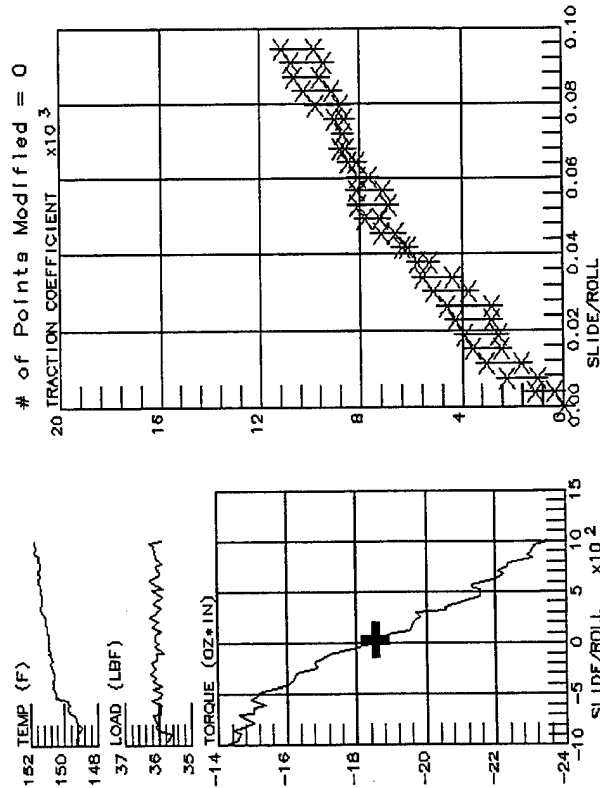
CM 93-172 PAO+16.5% 93-141 + Additives#73
150F 82LBF 516RPM 5 FILE: cm150h



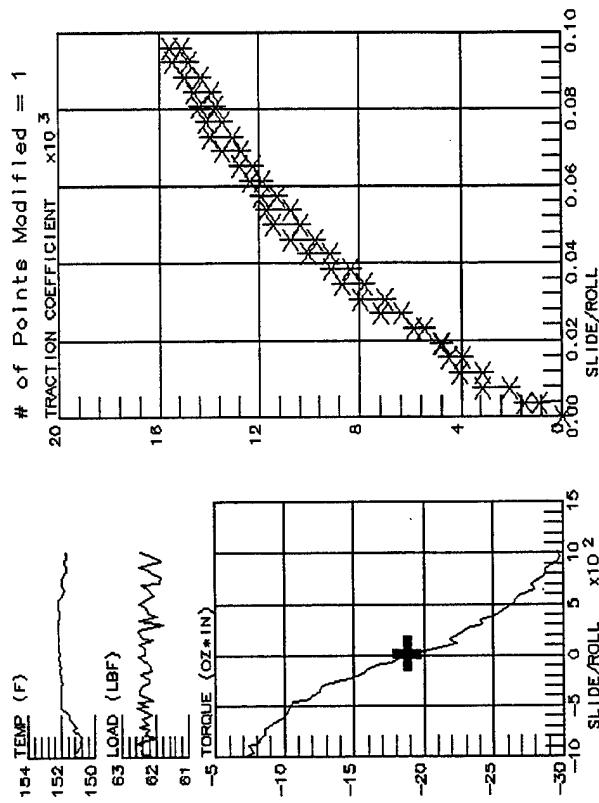
CM 93-172 PAO+16.5% 93-141 + Additives#74
150F 99LBF 516RPM 6 FILE: cm150h



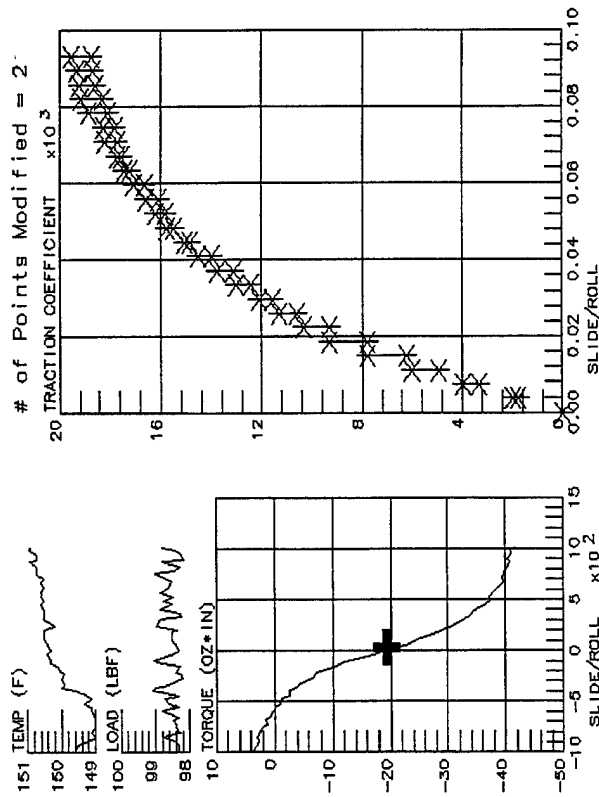
CM 93-172 PAO+16.5% 93-141 + Additives#75
150F 36LBF 776RPM 7 FILE: cm150h



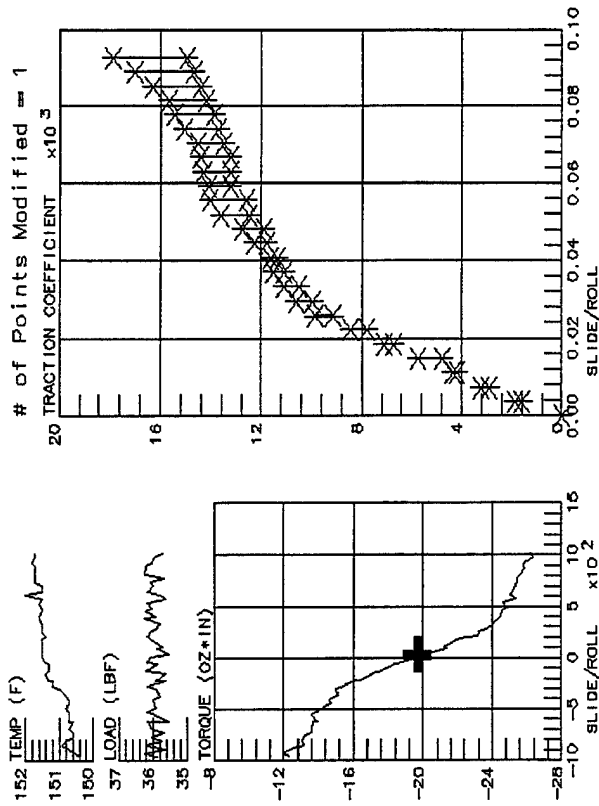
CM 93-172 PAO+16.5% 93-141 + Additives#76
150F 82LBF 776RPM 8 FILE: cm150h



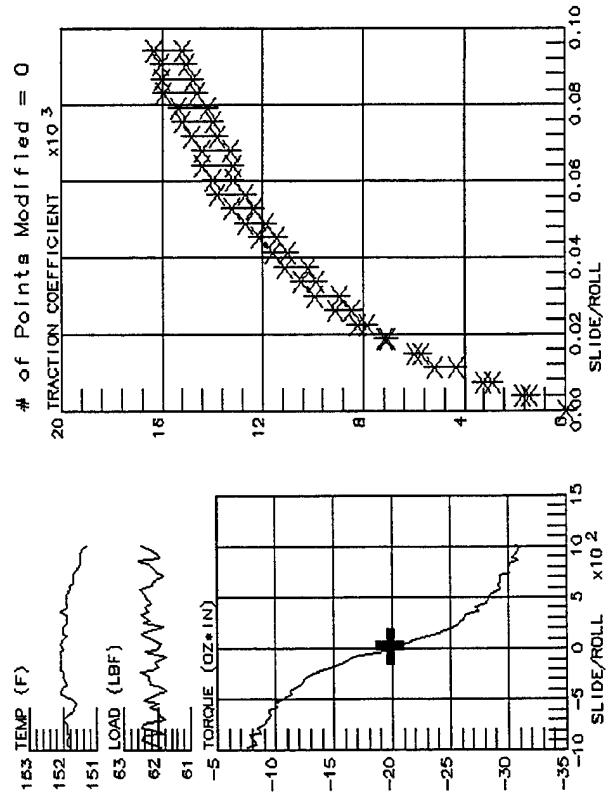
CM 93-172 PAO+16.5% 93-141 + Additives#77
150F 99LBF 7769RPM 9 FILE: am150h



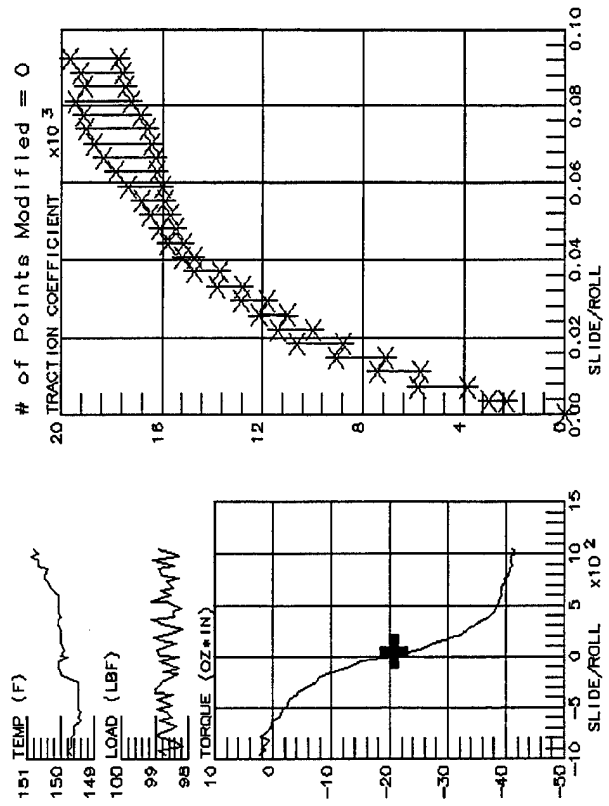
CM 93-172 PAO+16.5% 93-141 + Additives#78
150F 99LBF 10371RPM 10 FILE: am150h



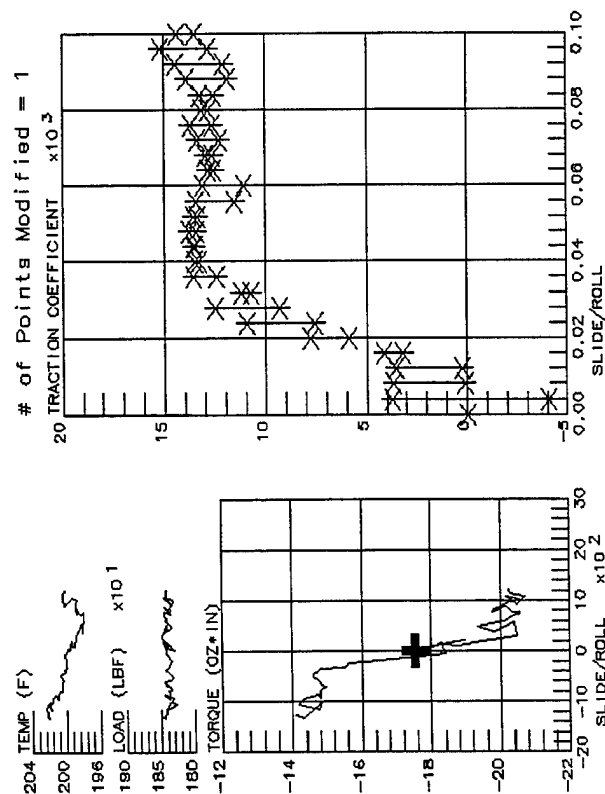
CM 93-172 PAO+16.5% 93-141 + Additives#79
150F 62LBF 10371RPM 11 FILE: am150h



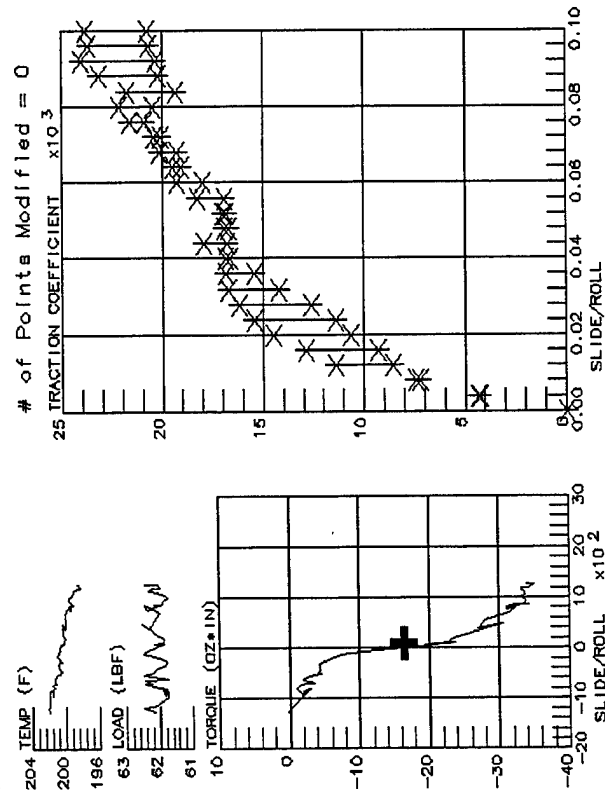
CM 93-172 PAO+16.5% 93-141 + Additives#80
150F 99LBF 10371RPM 12 FILE: am150h



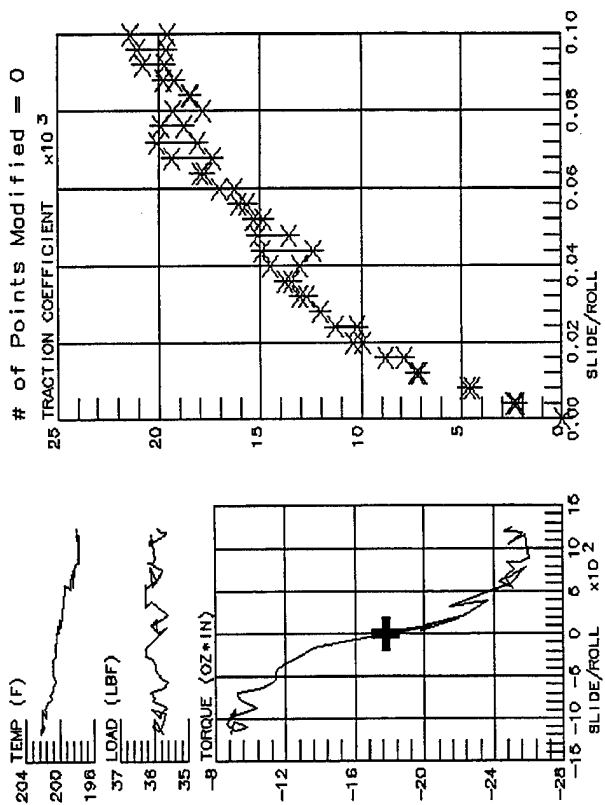
CM 93-172 PAO+16.5% 93-141 + Additives#81
200F 18LBF 310RPM 1 FILE: cm2001



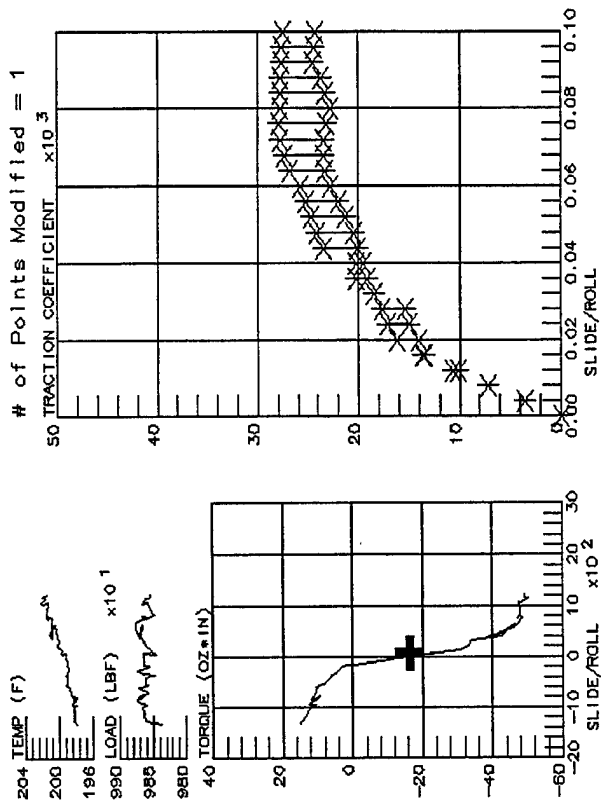
CM 93-172 PAO+16.5% 93-141 + Additives#83
200F 62LBF 310RPM 3 FILE: cm2001



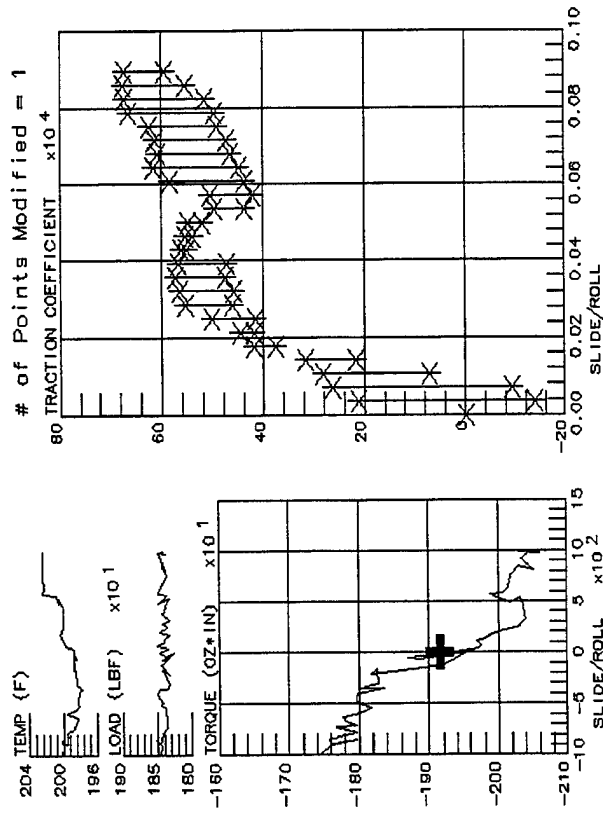
CM 93-172 PAO+16.5% 93-141 + Additives#82
200F 36LBF 310RPM 2 FILE: cm2001



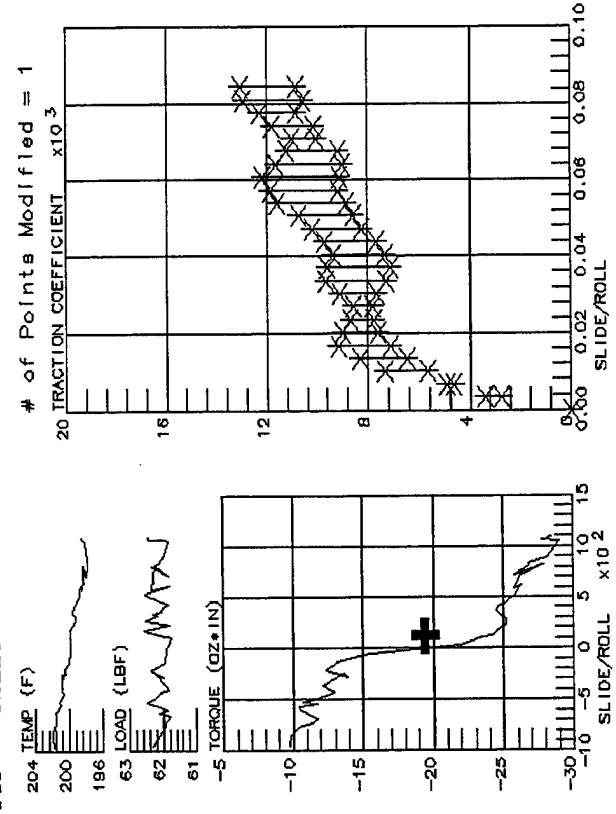
CM 93-172 PAO+16.5% 93-141 + Additives#84
200F 99LBF 310RPM 4 FILE: cm2001



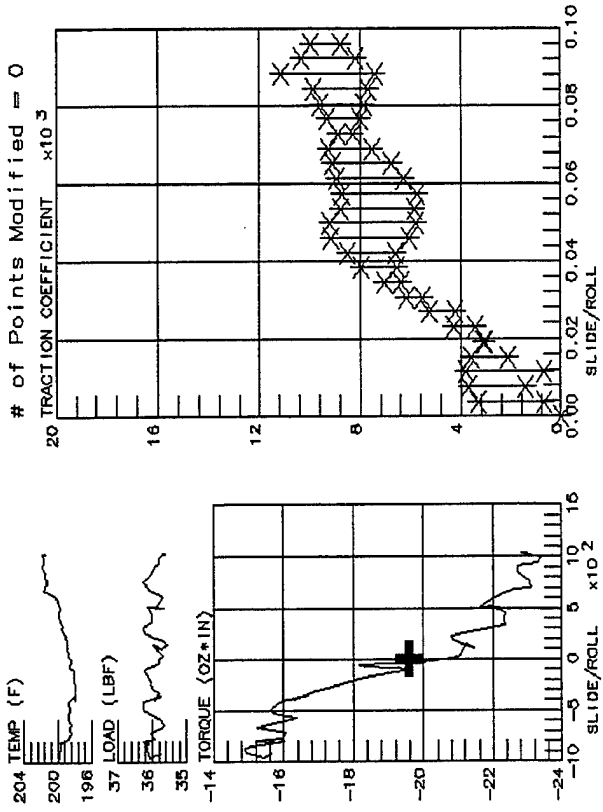
CM 93-172 PAO+16.5% 93-141 + Additives#85
200F 18LBF 660RPM 5 FILE: cm2001



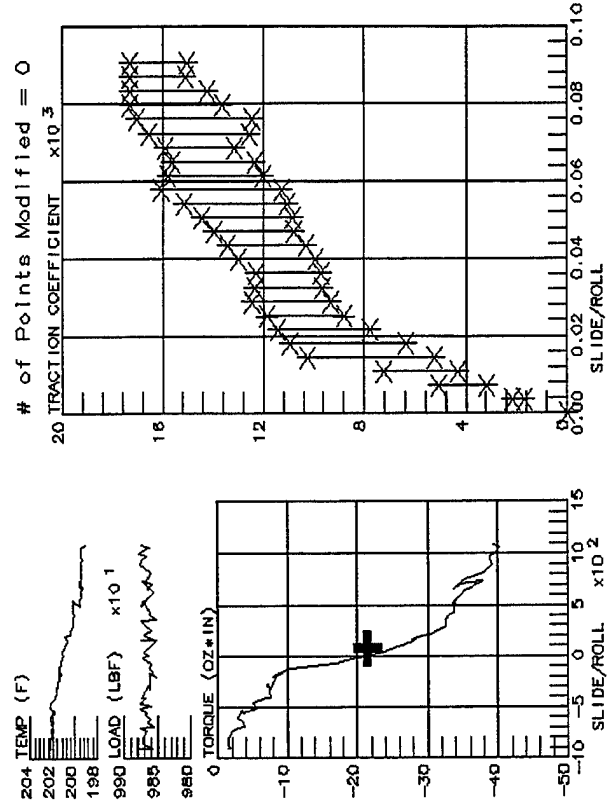
CM 93-172 PAO+16.5% 93-141 + Additives#87
200F 62LBF 660RPM 7 FILE: cm2001



CM 93-172 PAO+16.5% 93-141 + Additives#86
200F 36LBF 660RPM 6 FILE: cm2001

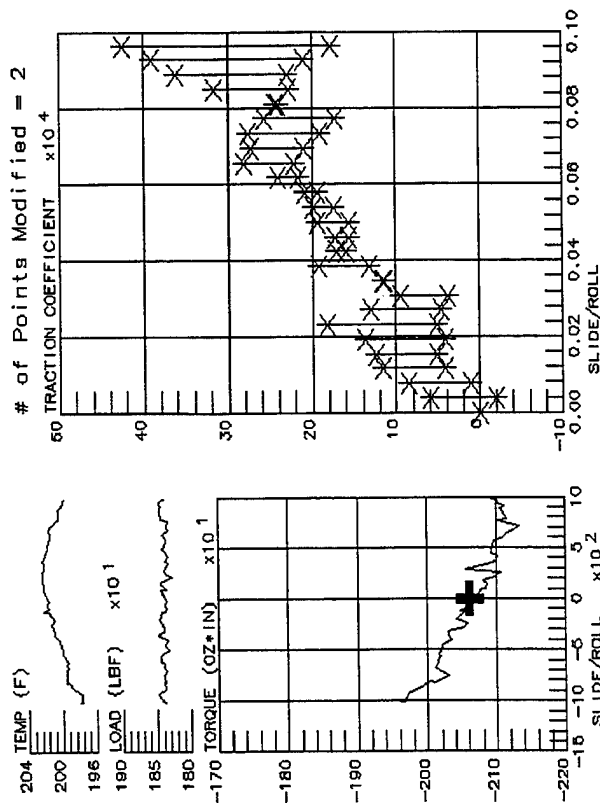


CM 93-172 PAO+16.5% 93-141 + Additives#88
200F 99LBF 660RPM 8 FILE: cm2001

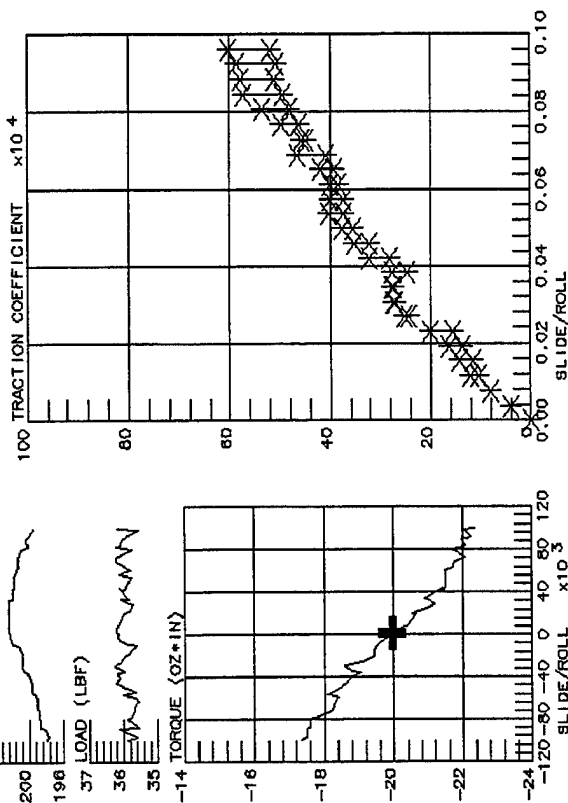


CM 93-172 PAO+16.5% 93-141 + Additives#89
200F 18LBF 1281RPM 9 FILE: cm2001

of Points Modified = 2

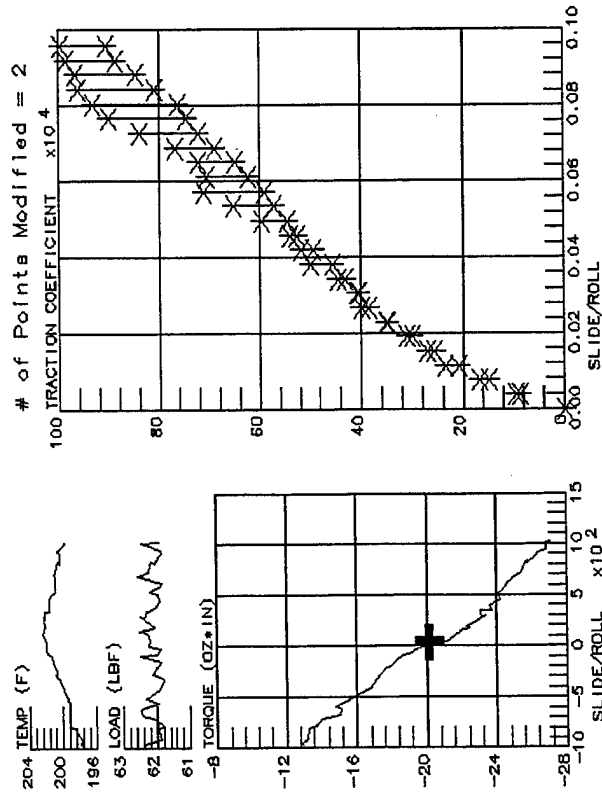


of Points Modified = 2

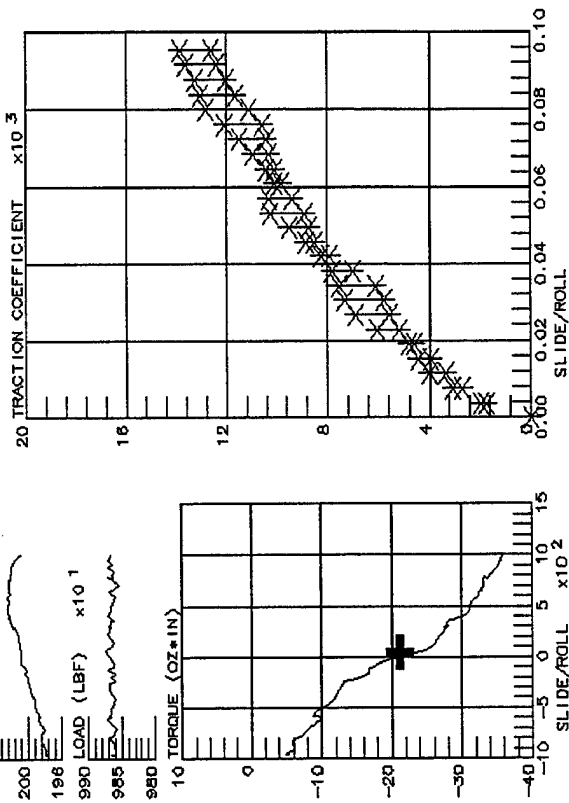


CM 93-172 PAO+16.5% 93-141 + Additives#91
200F 62LBF 1281RPM 11 FILE: cm2001

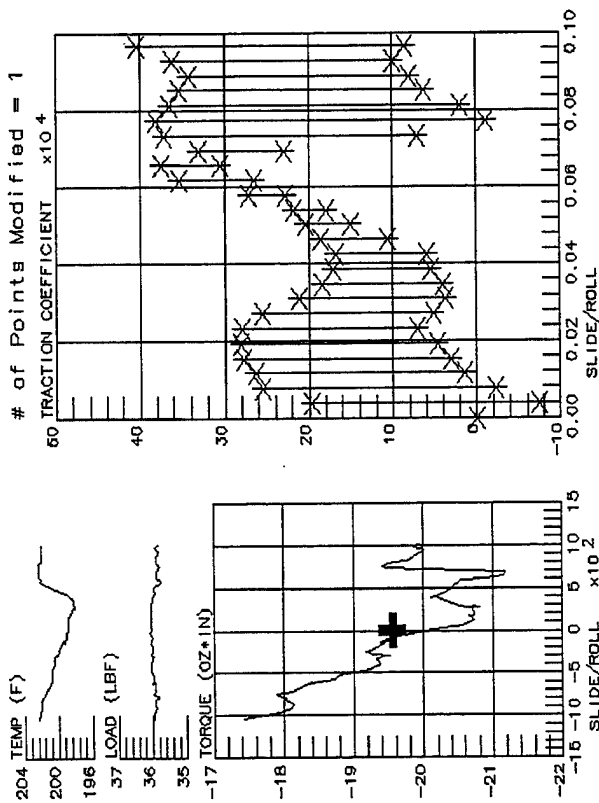
of Points Modified = 2



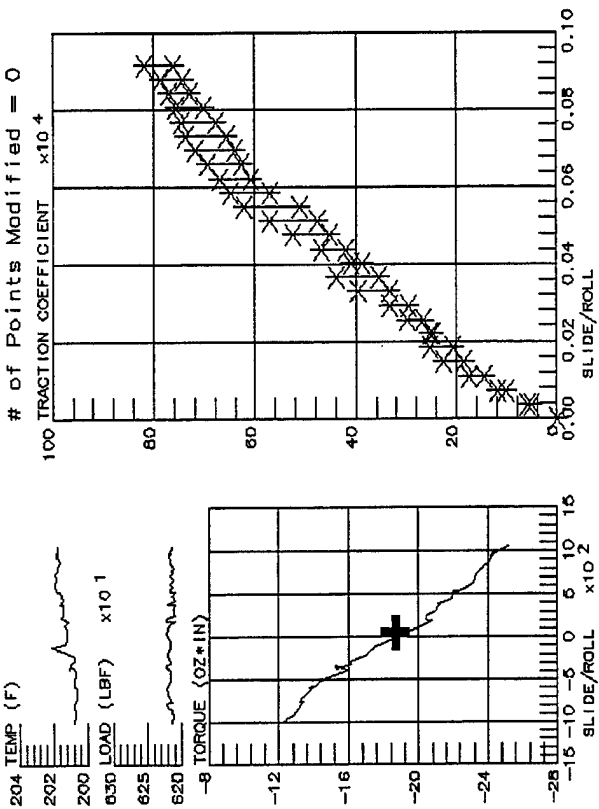
of Points Modified = 3



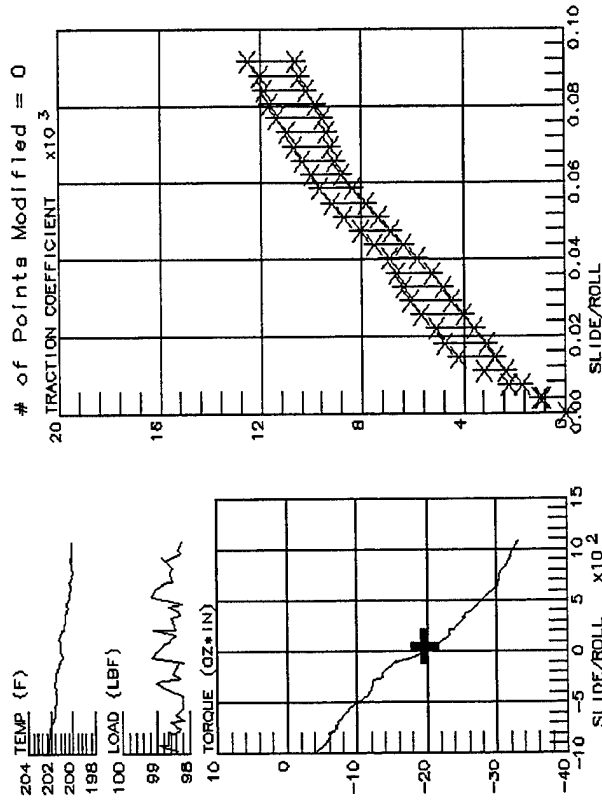
CM 93-172 PAO+16.5% 93-141 + Additives#93
200F 36LBF 2602RPM 1 FILE: cm200h



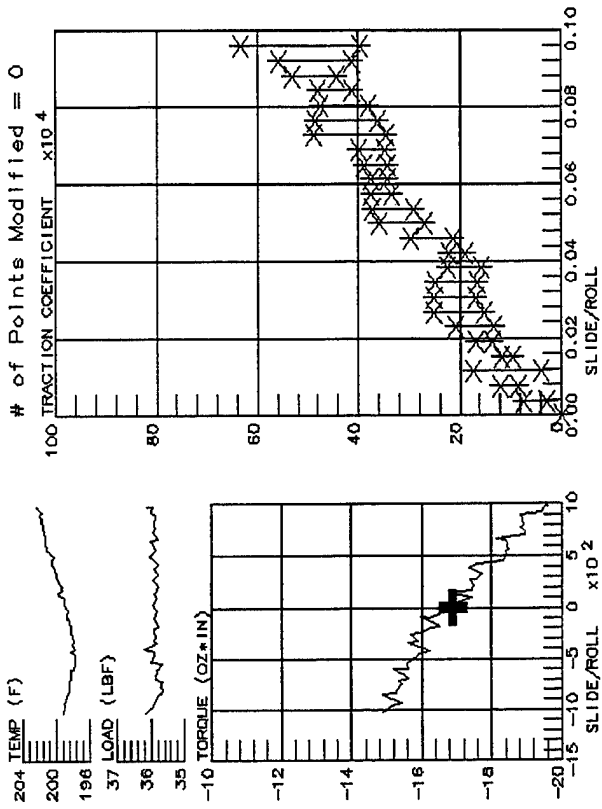
CM 93-172 PAO+16.5% 93-141 + Additives#94
200F 62LBF 2902RPM 2 FILE: cm200h



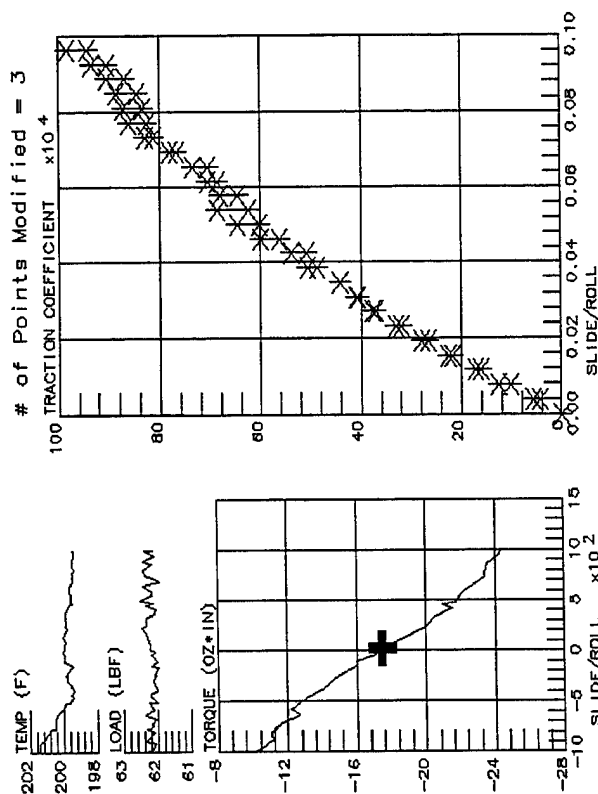
CM 93-172 PAO+16.5% 93-141 + Additives#95
200F 99LBF 2602RPM 3 FILE: cm200h



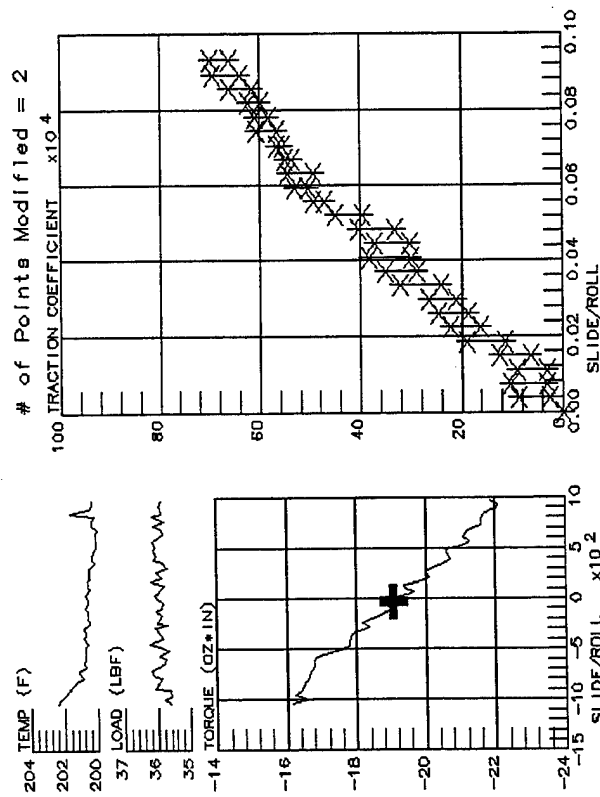
CM 93-172 PAO+16.5% 93-141 + Additives#96
200F 36LBF 5166RPM 4 FILE: cm200h



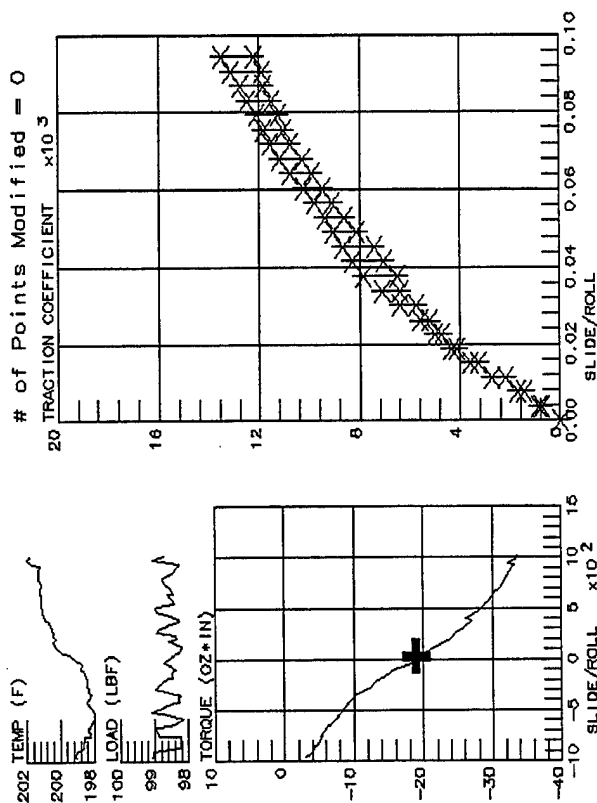
CM 93-172 PAO+16.5% 93-141 + Additives#97
200F 62LBF 516RPM 5 FILE: cm200h



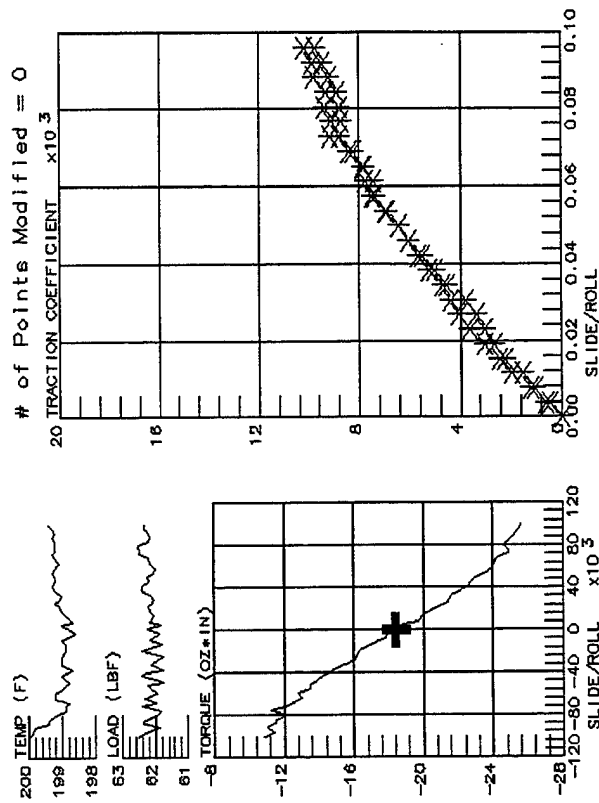
CM 93-172 PAO+16.5% 93-141 + Additives#99
200F 36LBF 776RPM 7 FILE: cm200h



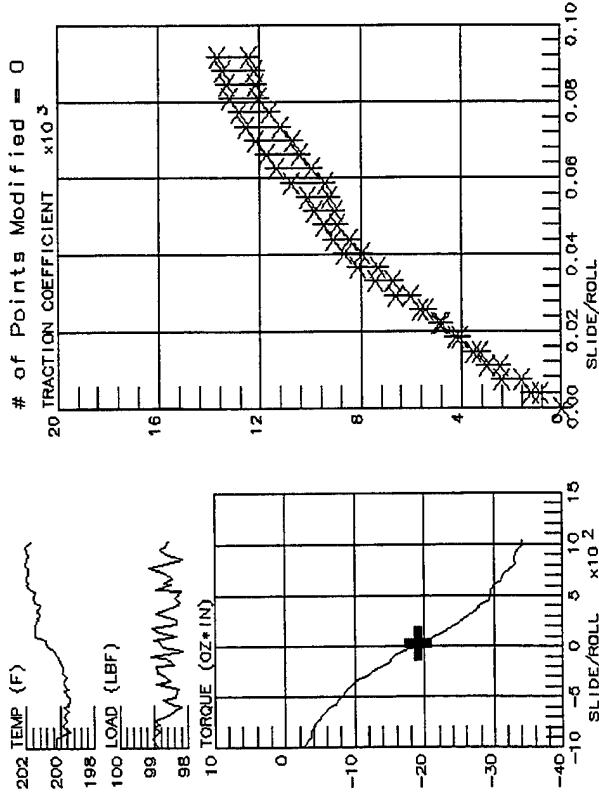
CM 93-172 PAO+16.5% 93-141 + Additives#98
200F 99LBF 516RPM 6 FILE: cm200h



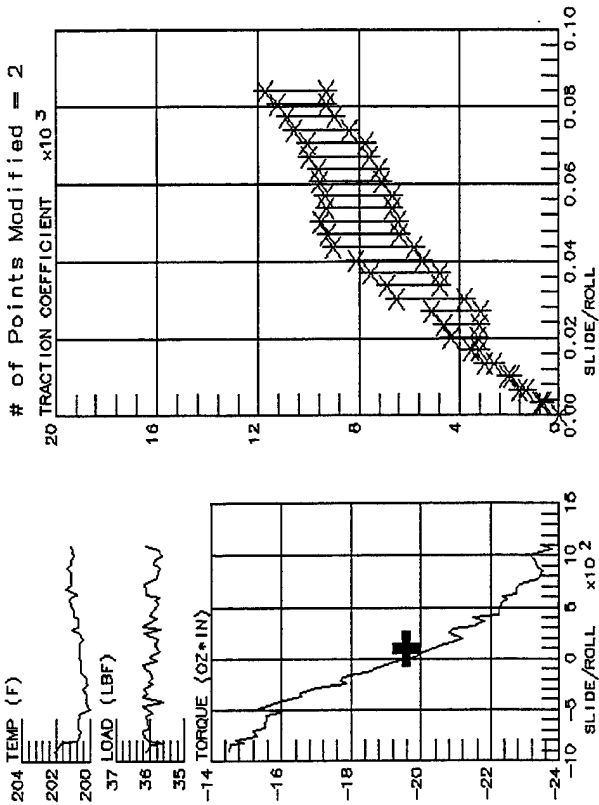
CM 93-172 PAO+16.5% 93-141 + Additives#100
200F 62LBF 776RPM 8 FILE: cm200h



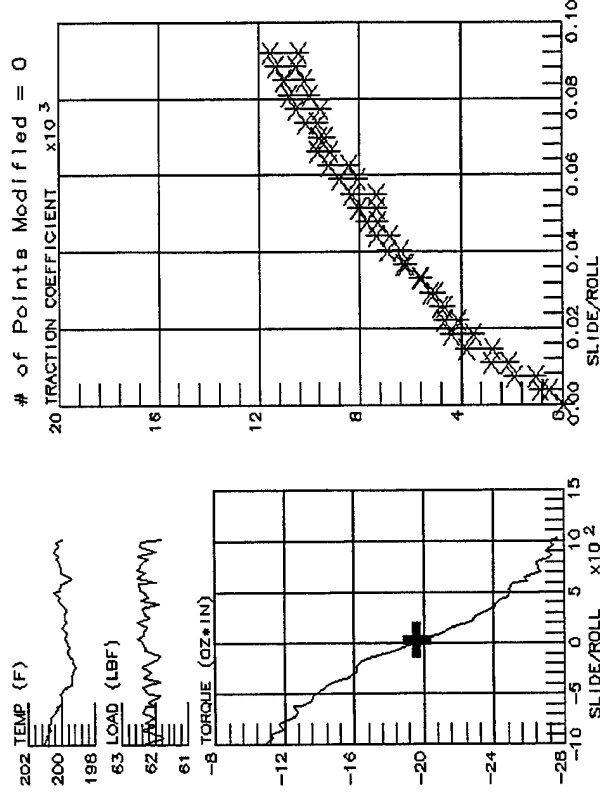
CM 93-172 PAO+16.5% 93-141 + Additives#101
200F 99LBF 7769RPM 9 FILE: cm200h



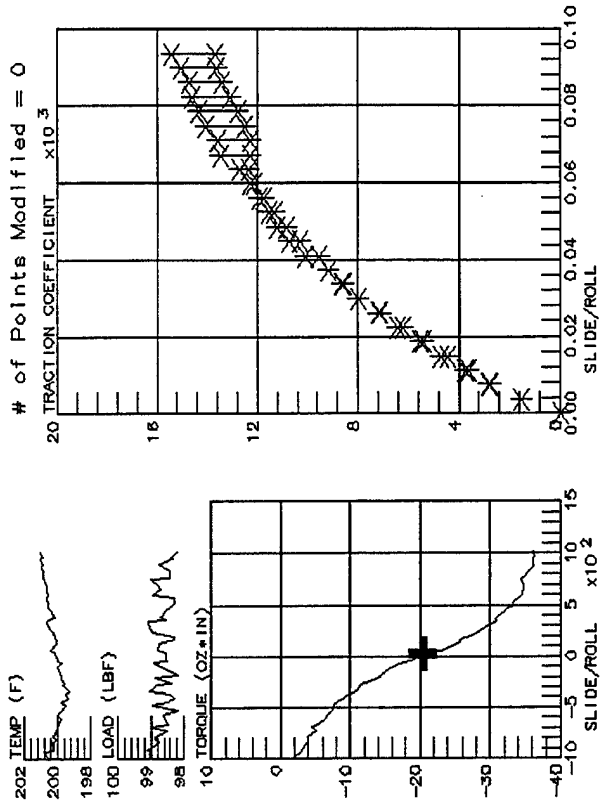
CM 93-172 PAO+16.5% 93-141 + Additives#102
200F 99LBF 10371RPM 10 FILE: cm200h



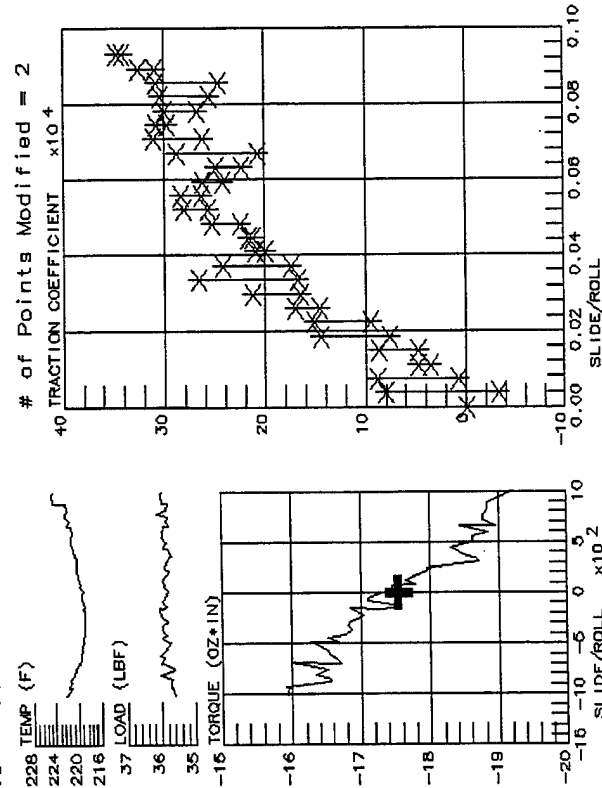
CM 93-172 PAO+16.5% 93-141 + Additives#103
200F 62LBF 10371RPM 11 FILE: cm200h



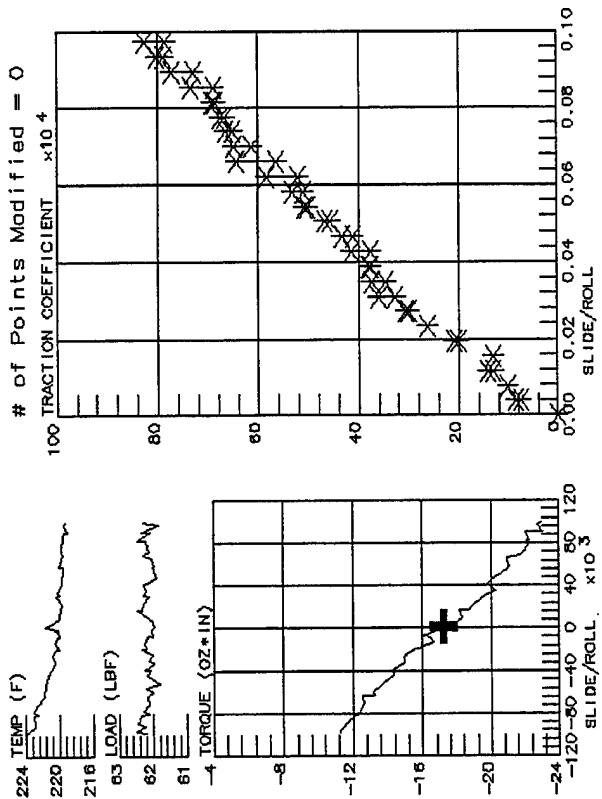
CM 93-172 PAO+16.5% 93-141 + Additives#104
200F 99LBF 10371RPM 12 FILE: cm200h



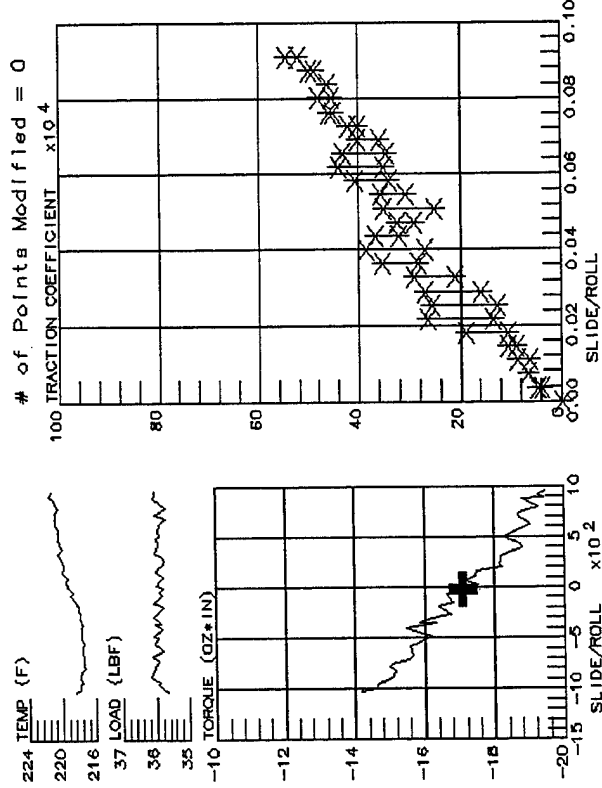
CM 93-172 PAO+16.5% 93-141 + Additives#106
220F 36LBF 516RPM 1 FILE: cm212ha



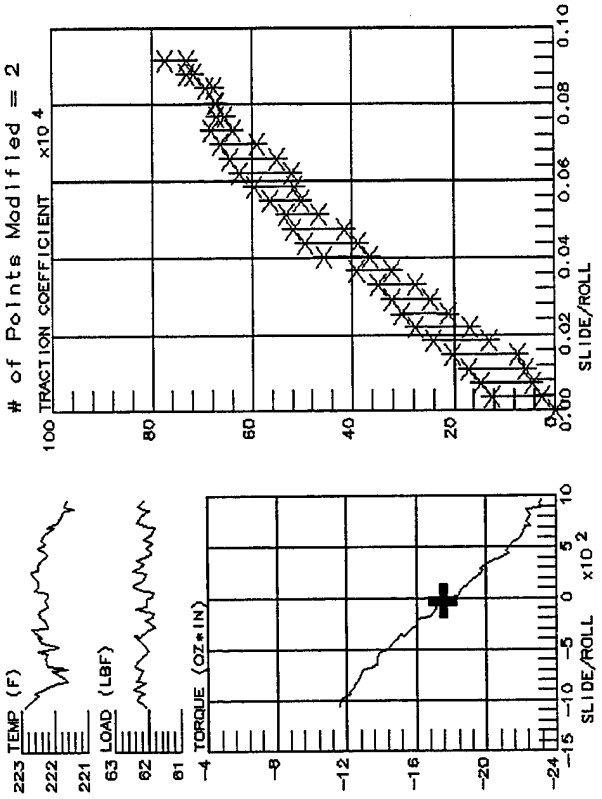
CM 93-172 PAO+16.5% 93-141 + Additives#108
220F 62LBF 516RPM 2 FILE: cm212ha



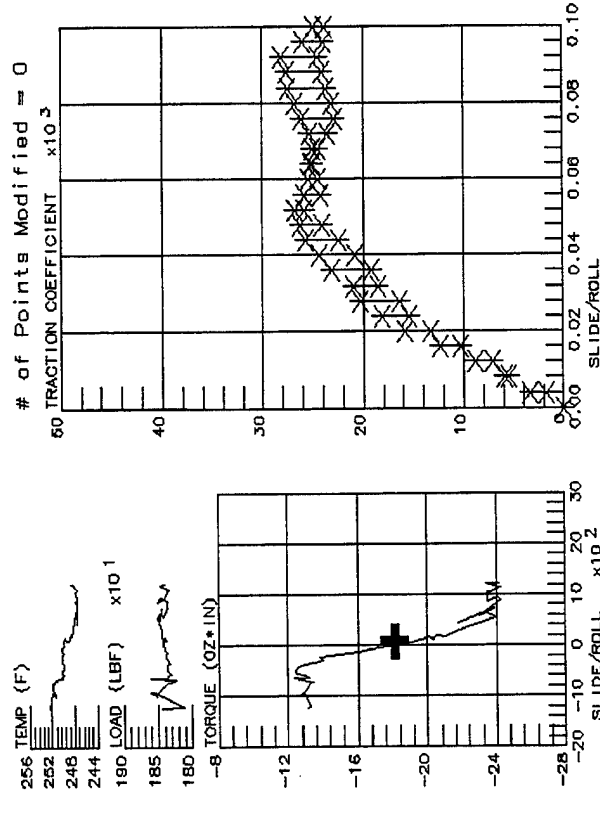
CM 93-172 PAO+16.5% 93-141 + Additives#107
220F 36LBF 648RPM 3 FILE: cm212ha



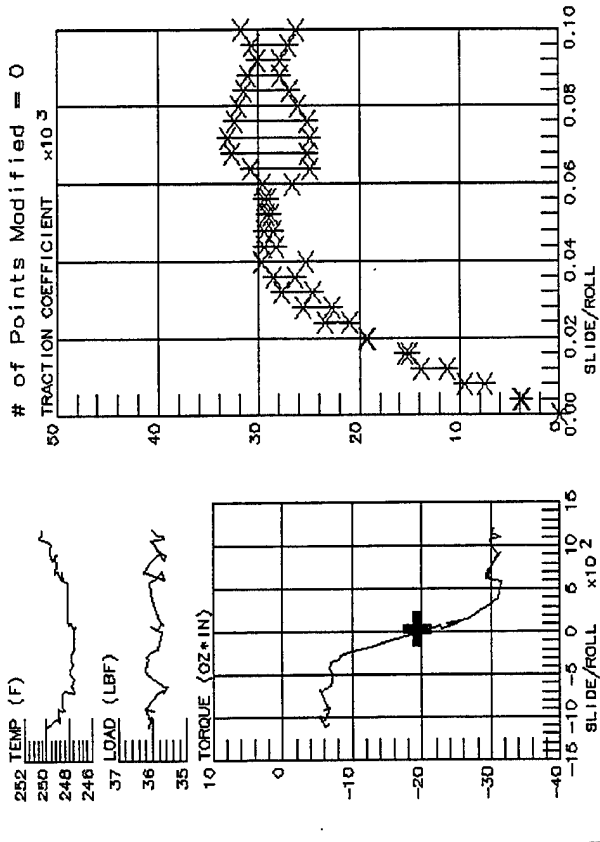
CM 93-172 PAO+16.5% 93-141 + Additives#108
220F 62LBF 648RPM 4 FILE: cm212ha



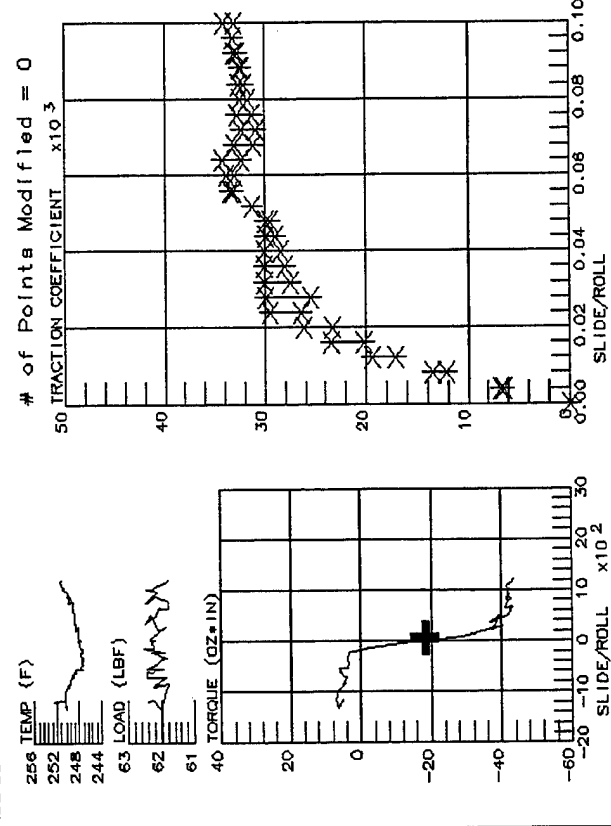
CM 93-172 PAO+16.5% 93-141 + Additives#109
250F 18LBF 310RPM 1 FILE: cm2501



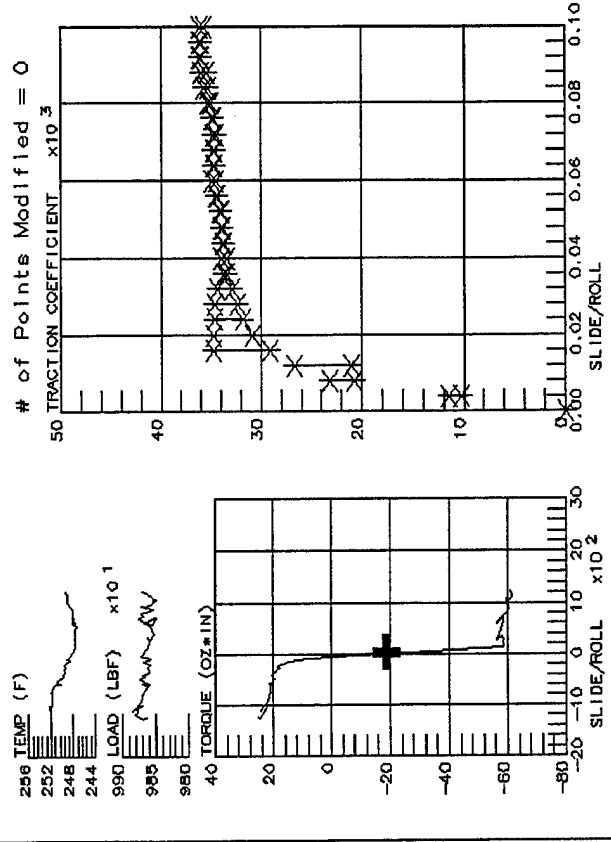
CM 93-172 PAO+16.5% 93-141 + Additives#110
250F 36LBF 310RPM 2 FILE: cm2501



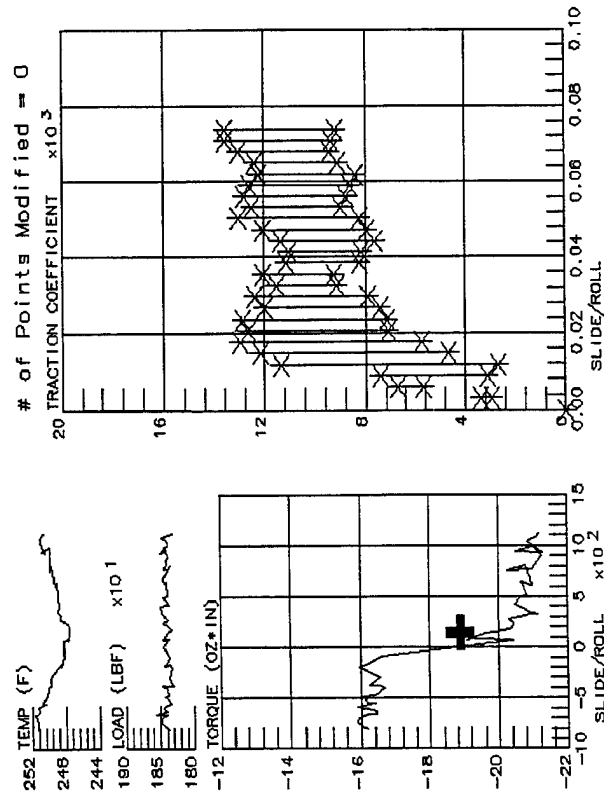
CM 93-172 PAO+16.5% 93-141 + Additives#111
250F 62LBF 310RPM 3 FILE: cm2501



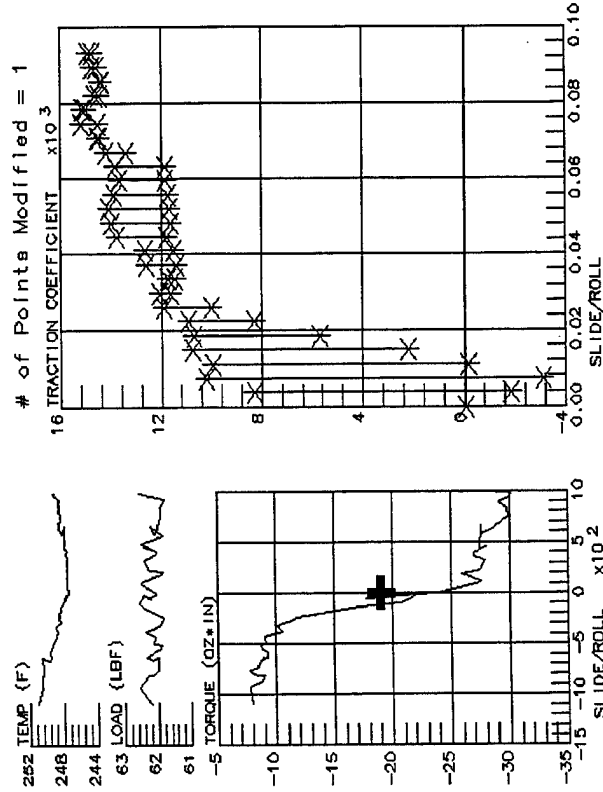
CM 93-172 PAO+16.5% 93-141 + Additives#112
250F 99LBF 310RPM 4 FILE: cm2501



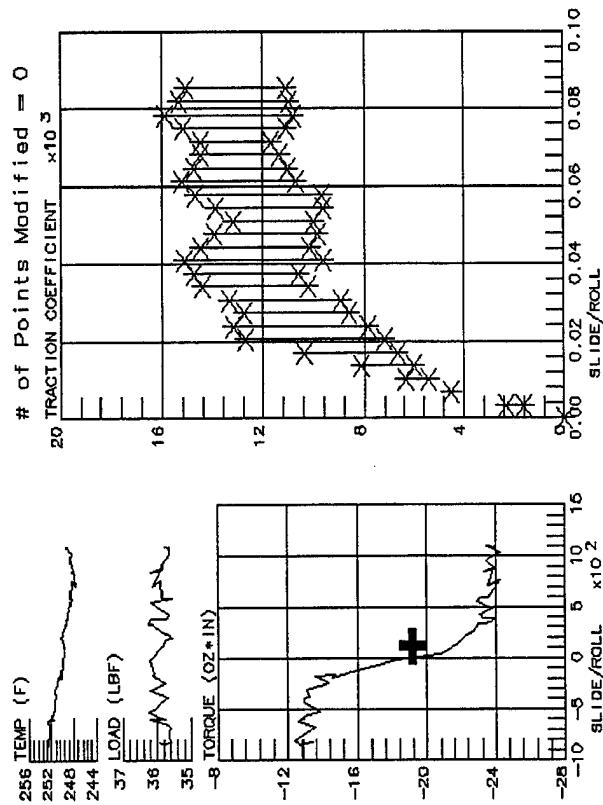
CM 93-172 PAO+16.5% 93-141 + Additives#113
250F 18LBF 660RPM 5 FILE: cm2501



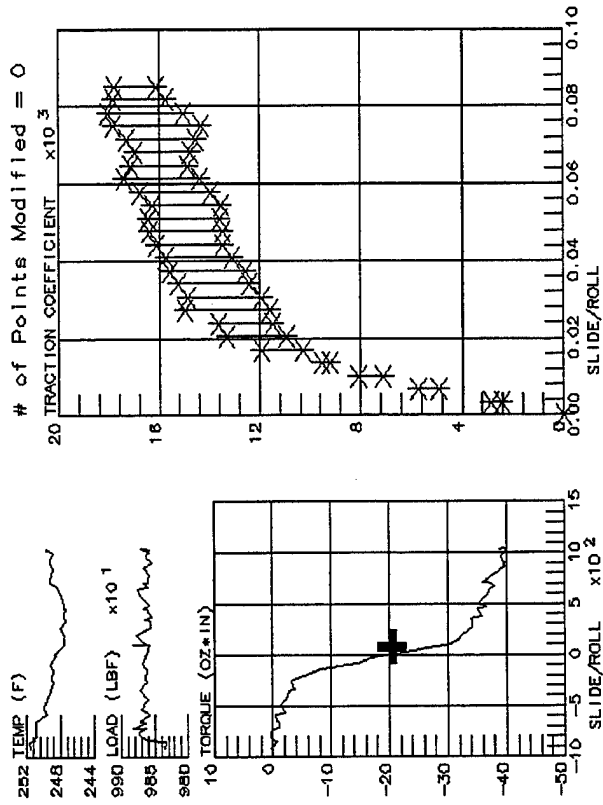
CM 93-172 PAO+16.5% 93-141 + Additives#115
250F 62LBF 660RPM 7 FILE: cm2501



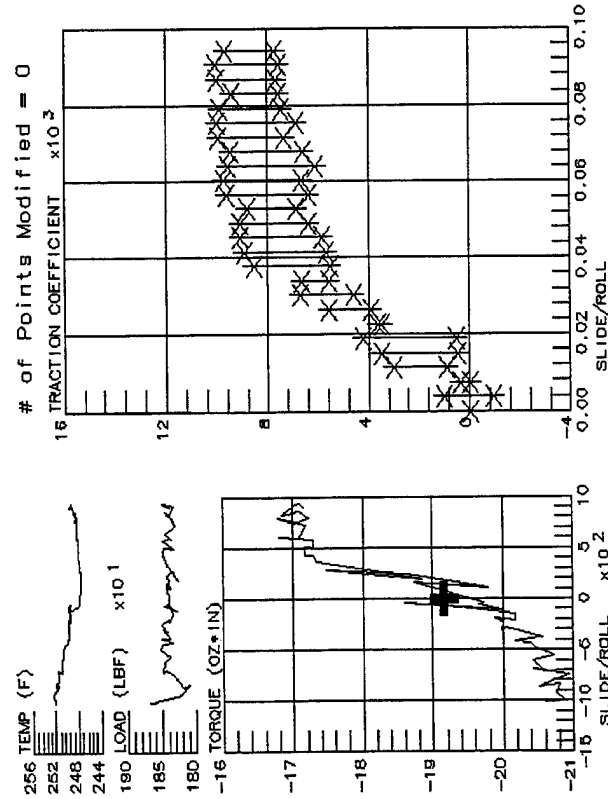
CM 93-172 PAO+16.5% 93-141 + Additives#114
250F 36LBF 660RPM 6 FILE: cm2501



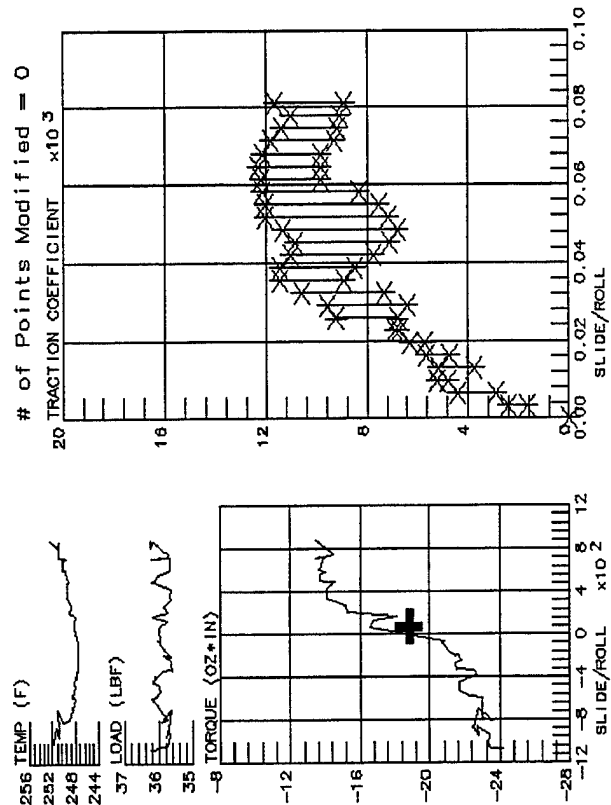
CM 93-172 PAO+16.5% 93-141 + Additives#116
250F 99LBF 660RPM 8 FILE: cm2501



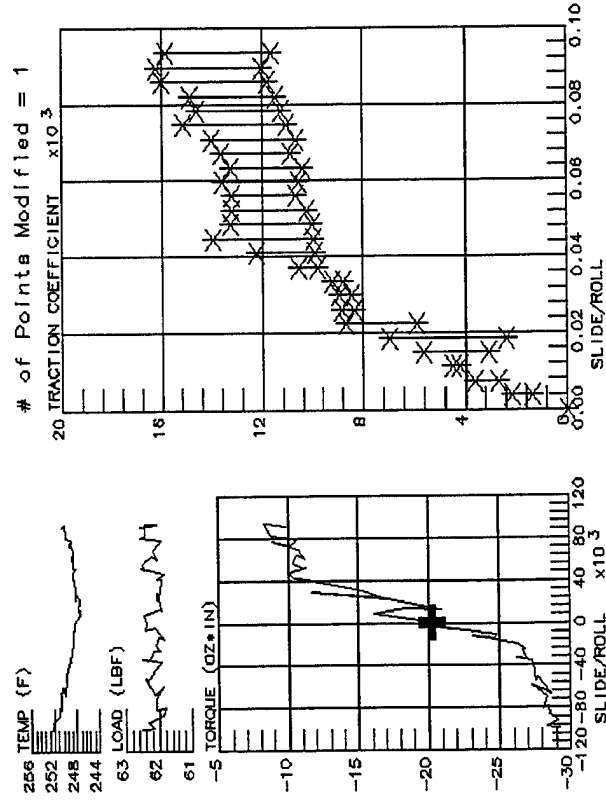
CM 93-172 PAO+16.5% 93-141 + Additives#117
250F 18LBF 660RPM 9 FILE: cm2501



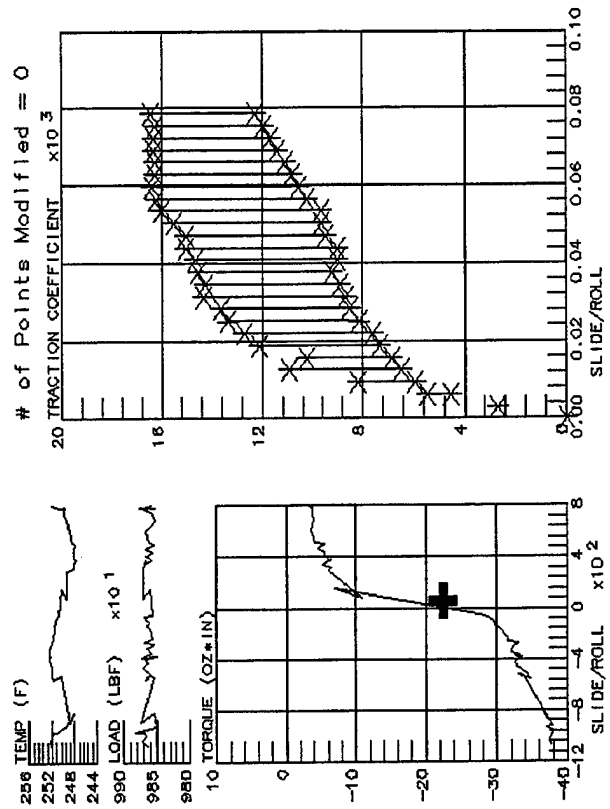
CM 93-172 PAO+16.5% 93-141 + Additives#118
250F 36LBF 660RPM 10 FILE: cm2501



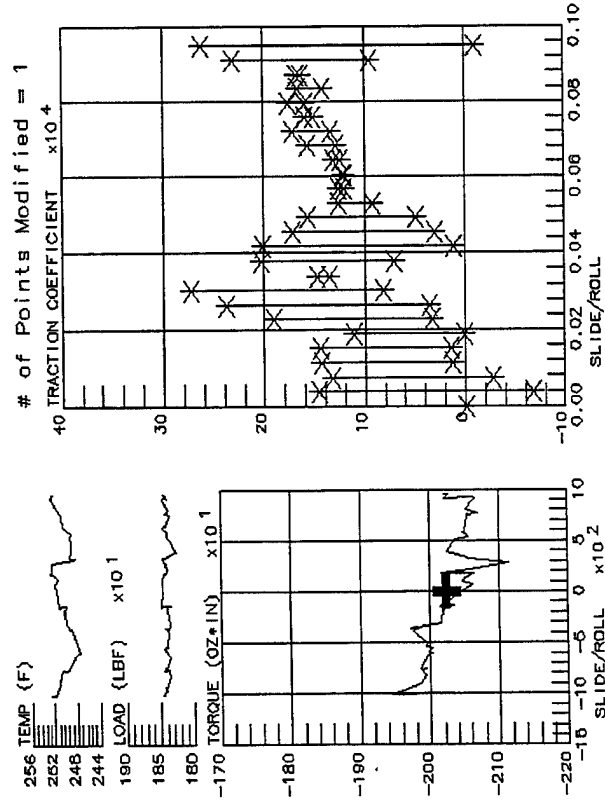
CM 93-172 PAO+16.5% 93-141 + Additives#119
250F 62LBF 660RPM 11 FILE: cm2501



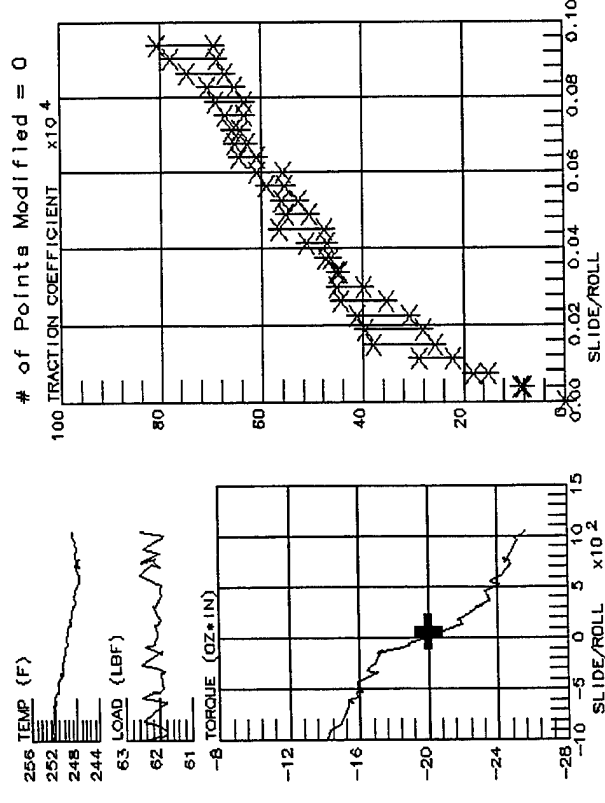
CM 93-172 PAO+16.5% 93-141 + Additives#120
250F 99LBF 660RPM 12 FILE: cm2501



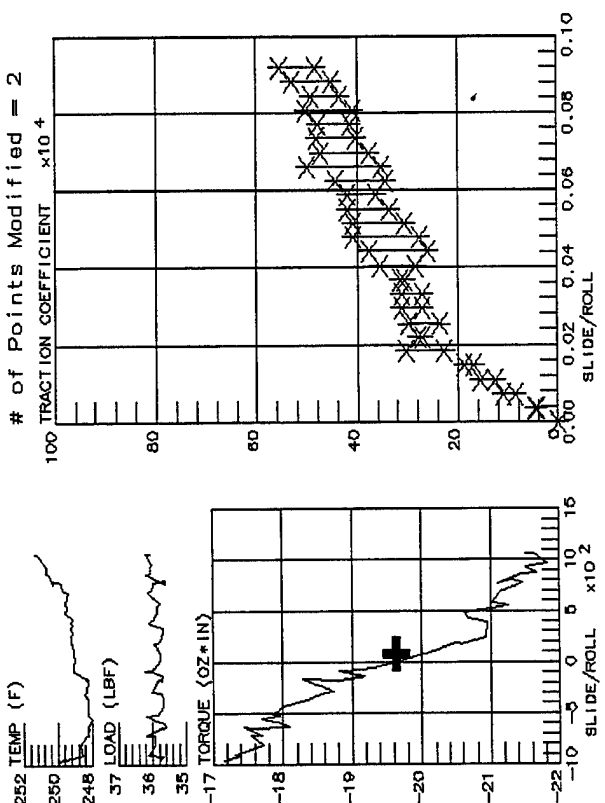
CM 93-172 PAO+16.5% 93-141 + Additives#121
250F 18LBF 1281RPM 13 FILE: cm2501



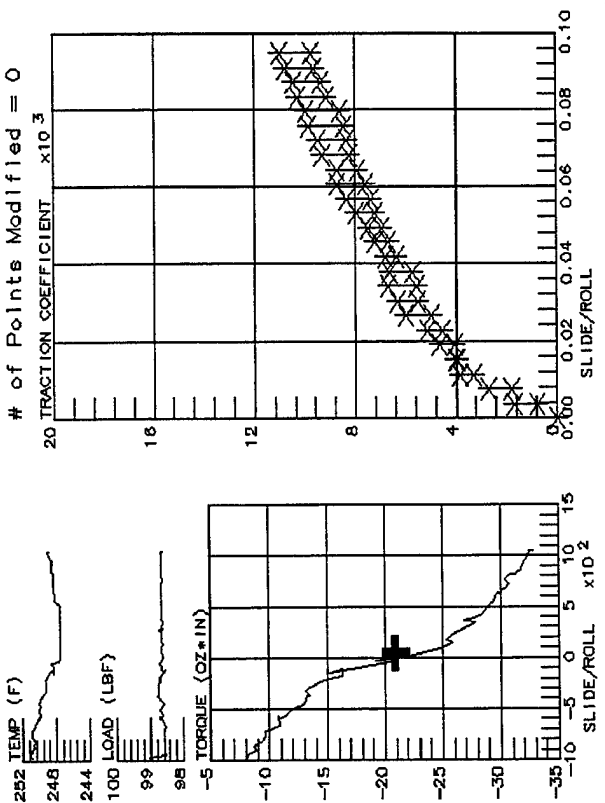
CM 93-172 PAO+16.5% 93-141 + Additives#123
250F 62LBF 1281RPM 15 FILE: cm2501



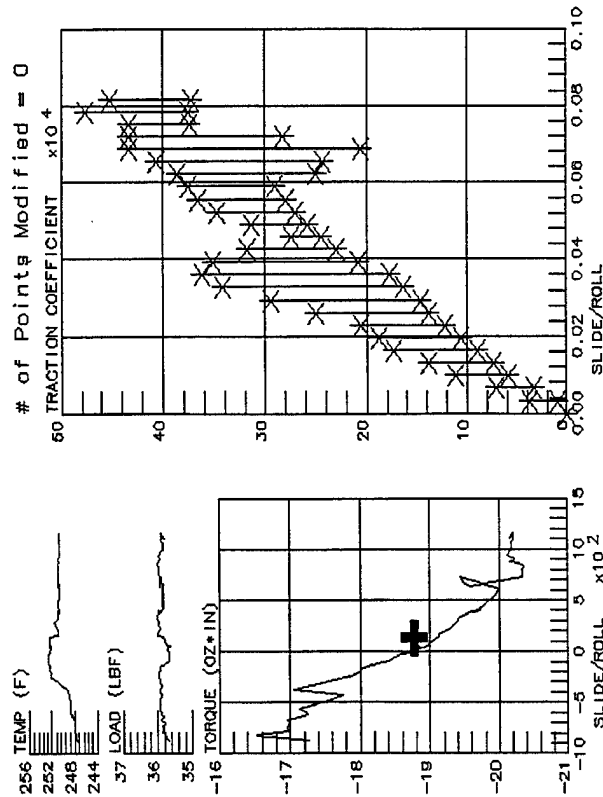
CM 93-172 PAO+16.5% 93-141 + Additives#122
250F 36LBF 1281RPM 14 FILE: cm2501



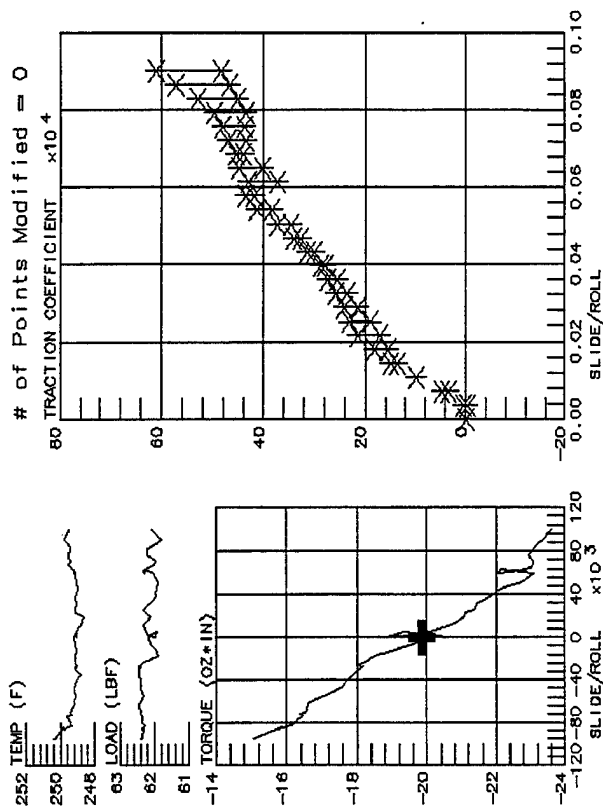
CM 93-172 PAO+16.5% 93-141 + Additives#124
250F 99LBF 1281RPM 16 FILE: cm2501



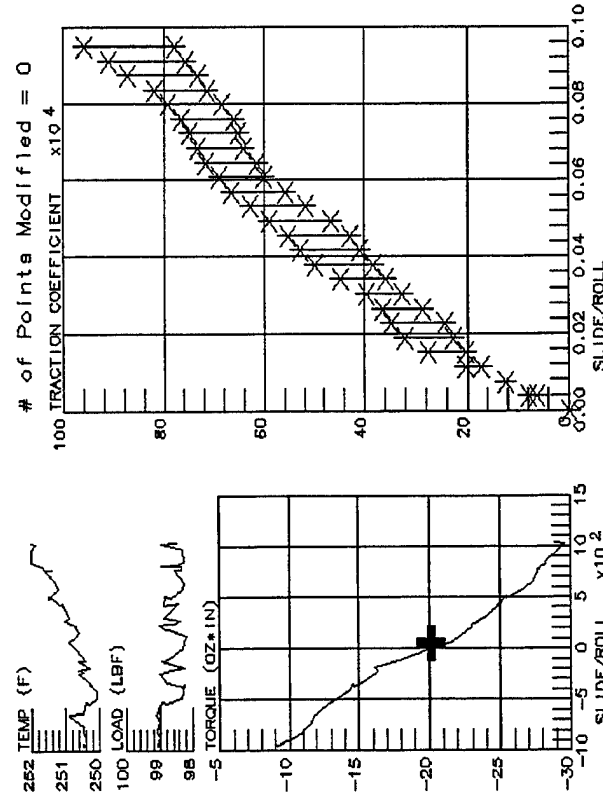
CM 93-172 PAO+16.5% 93-141 + Additives#125
250F 36LBF 2602RPM 1 FILE: cm250h



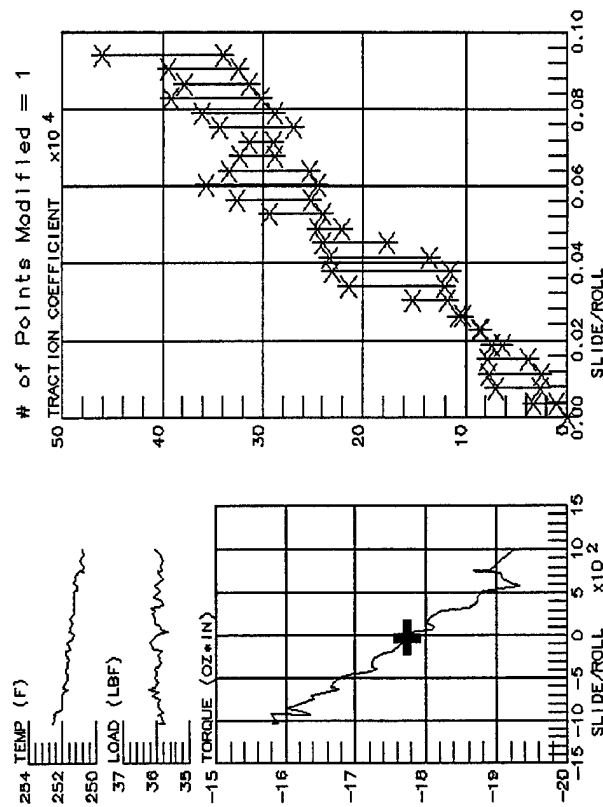
CM 93-172 PAO+16.5% 93-141 + Additives#128
250F 62LBF 2602RPM 2 FILE: cm260h



CM 93-172 PAO+16.5% 93-141 + Additives#127
250F 99LBF 2602RPM 3 FILE: cm250h

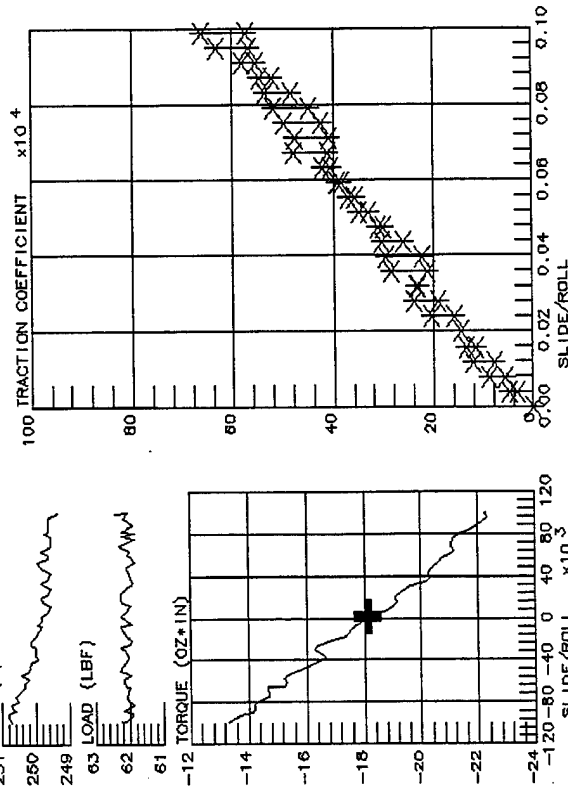


CM 93-172 PAO+16.5% 93-141 + Additives#128
250F 36LBF 5166RPM 4 FILE: cm250h



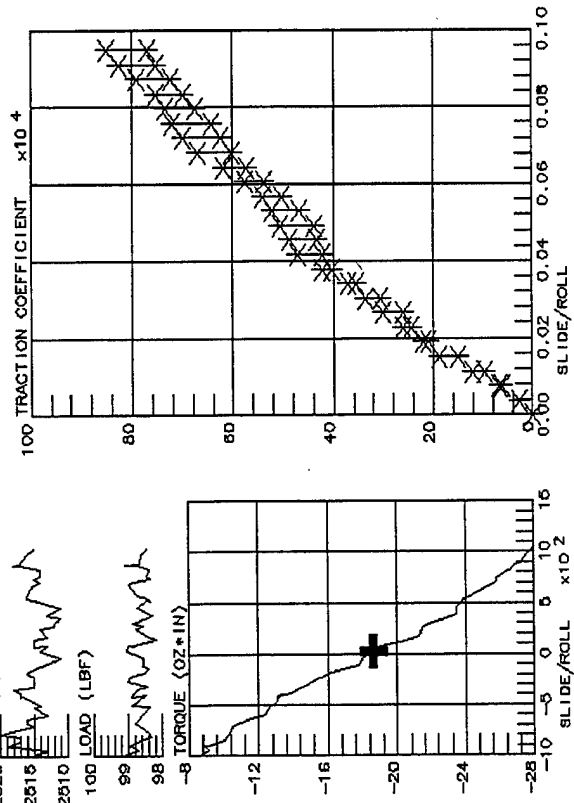
CM 93-172 PAO+16.5% 93-141 + Additives#129
250F 62LBF 516RPM 5 FILE: cm250h

of Points Modified = 0



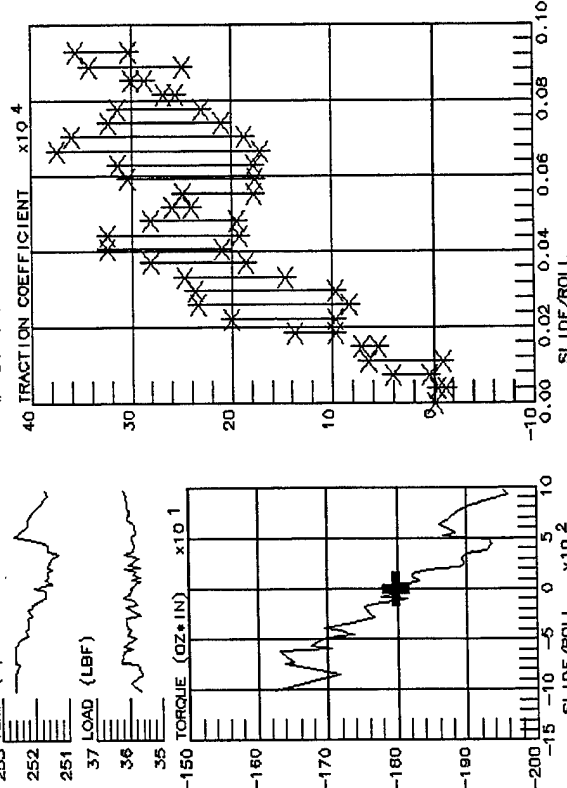
CM 93-172 PAO+16.5% 93-141 + Additives#130
250F 99LBF 516RPM 8 FILE: cm250h

of Points Modified = 0



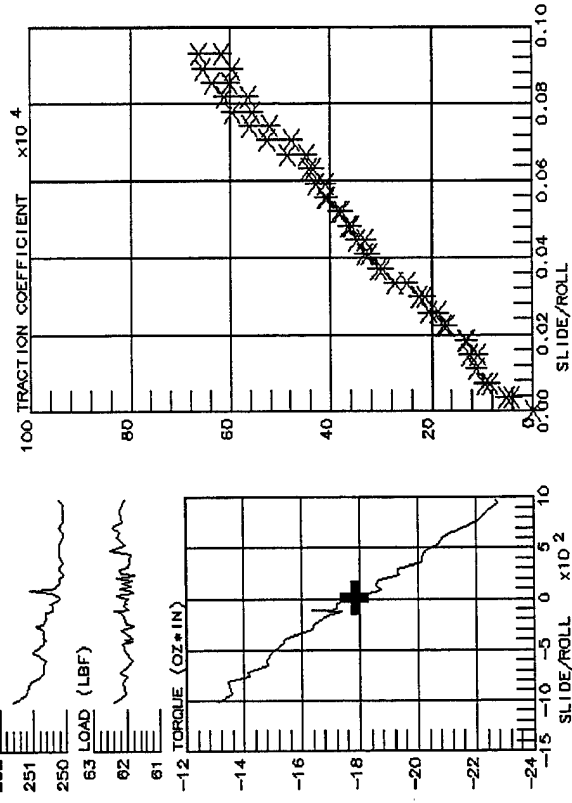
CM 93-172 PAO+16.5% 93-141 + Additives#131
250F 36LBF 776RPM 7 FILE: cm250h

of Points Modified = 0

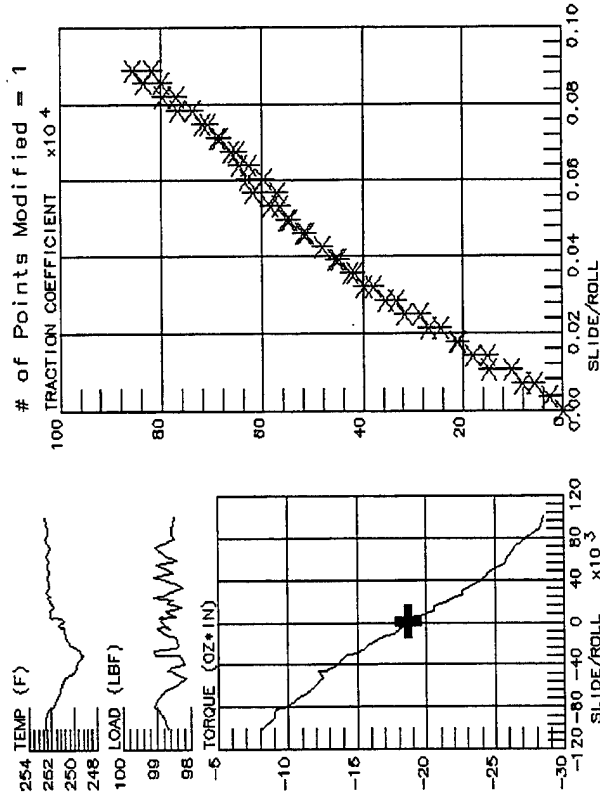


CM 93-172 PAO+16.5% 93-141 + Additives#132
250F 62LBF 776RPM 8 FILE: cm250h

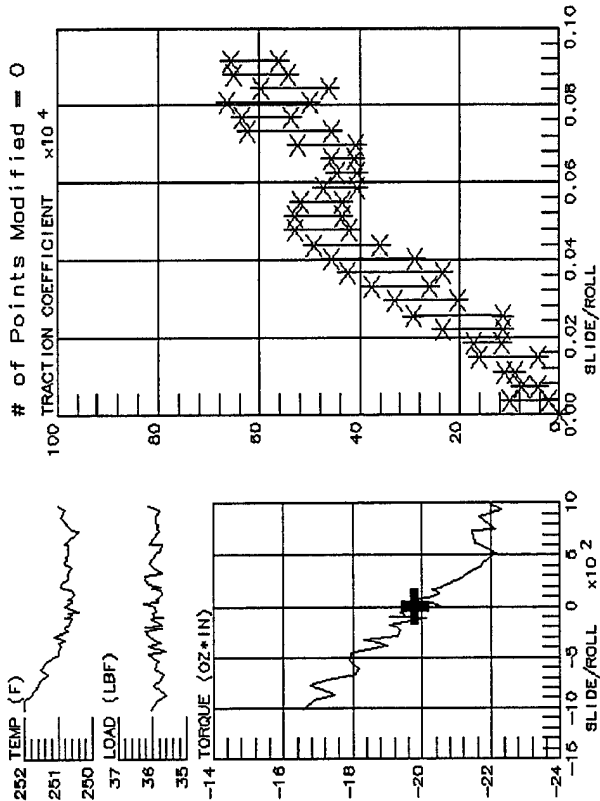
of Points Modified = 0



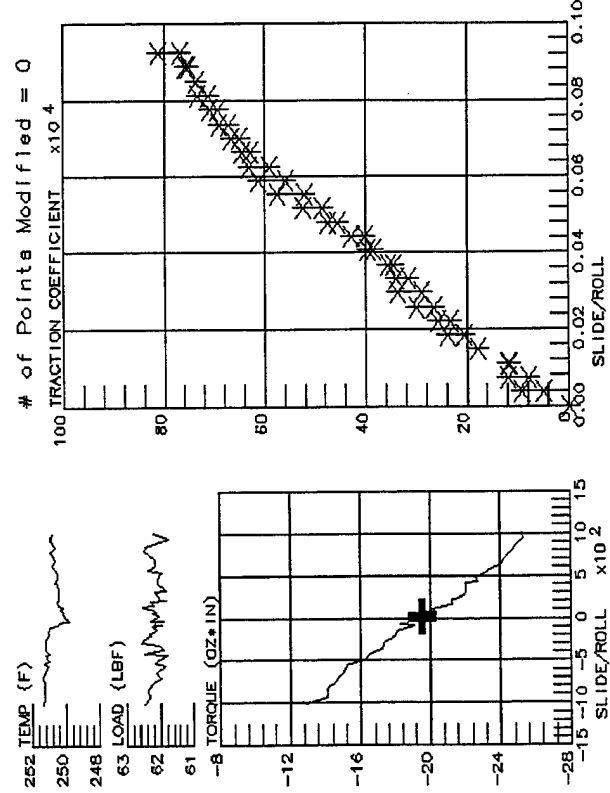
CM 93-172 PAO+16.5% 93-141 + Additives#133
250F 99LBF 7769RPM 9 FILE: cm250h



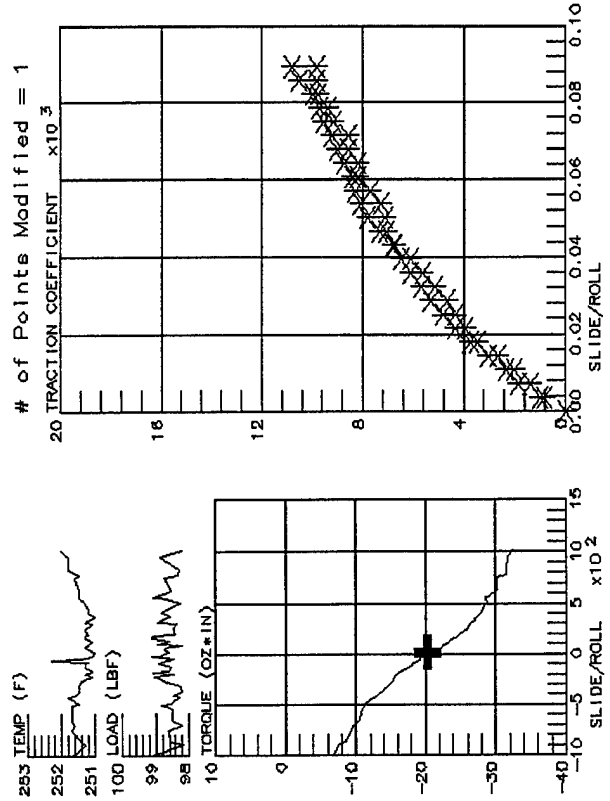
CM 93-172 PAO+16.5% 93-141 + Additives#134
250F 36LBF 10371RPM 10 FILE: cm250h



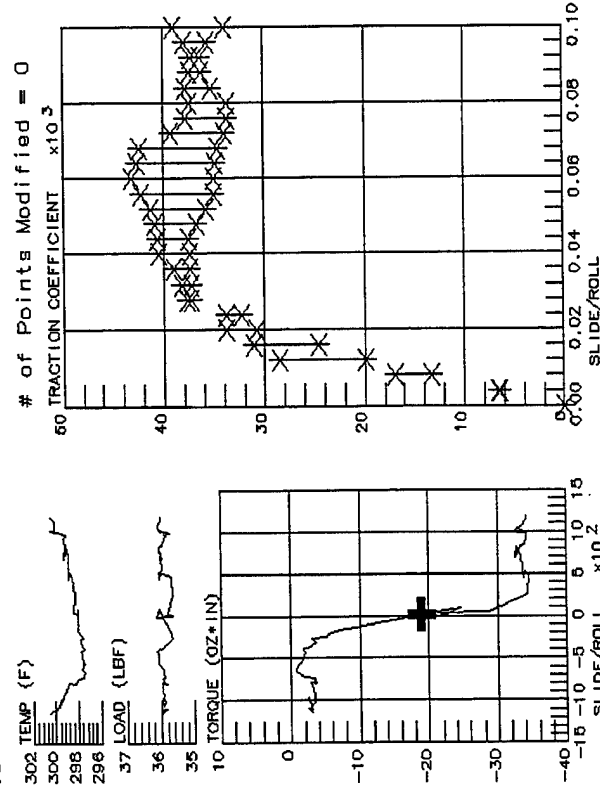
CM 93-172 PAO+16.5% 93-141 + Additives#135
250F 62LBF 10371RPM 11 FILE: cm250h



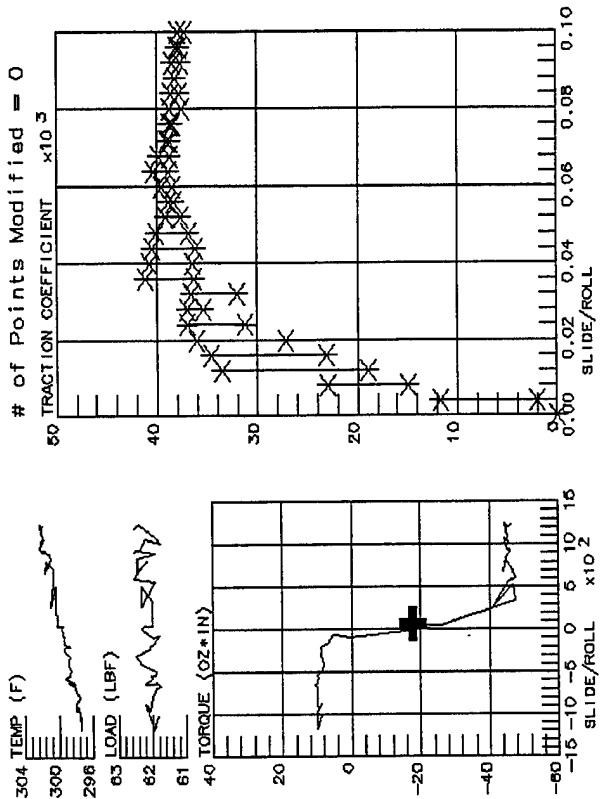
CM 93-172 PAO+16.5% 93-141 + Additives#136
250F 99LBF 10371RPM 12 FILE: cm250h



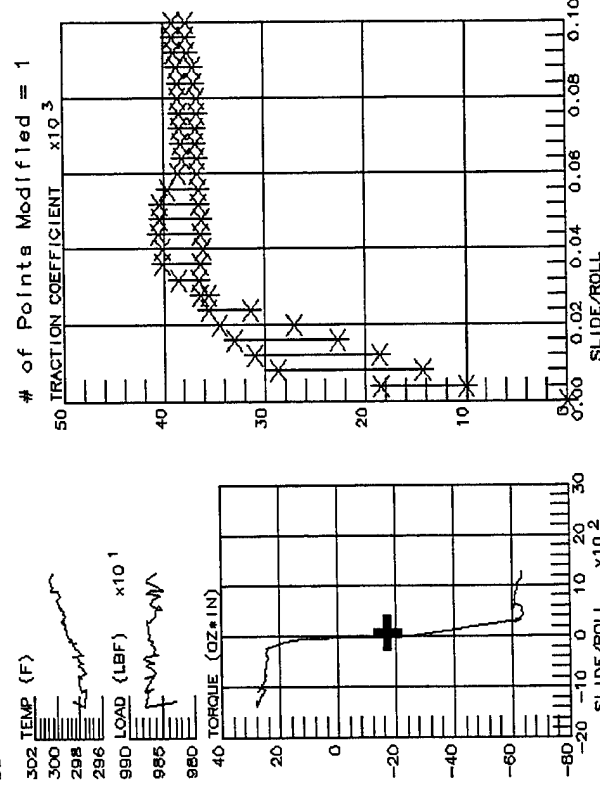
CM 93-172 PAO+16.5% 93-141 + Additives#137
300F 36LBF 310RPM 1 FILE: cm3001



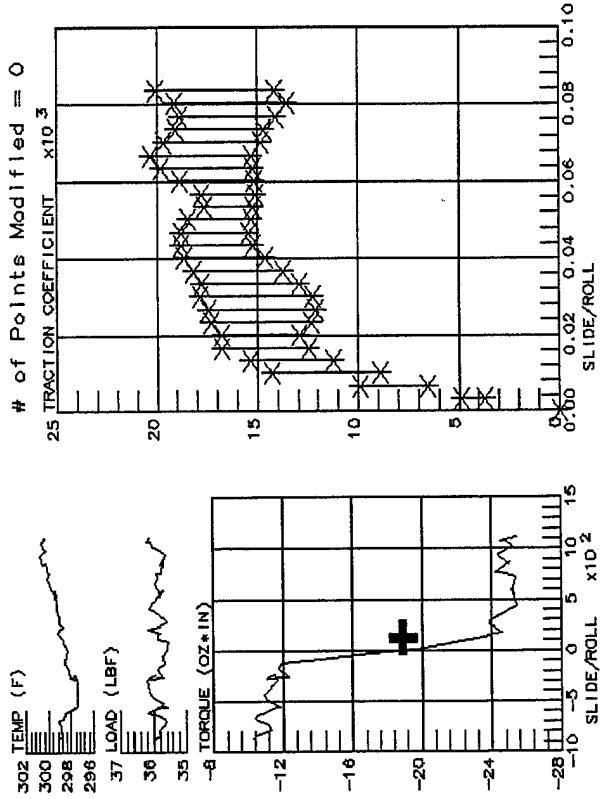
CM 93-172 PAO+16.5% 93-141 + Additives#138
300F 62LBF 310RPM 2 FILE: cm3001



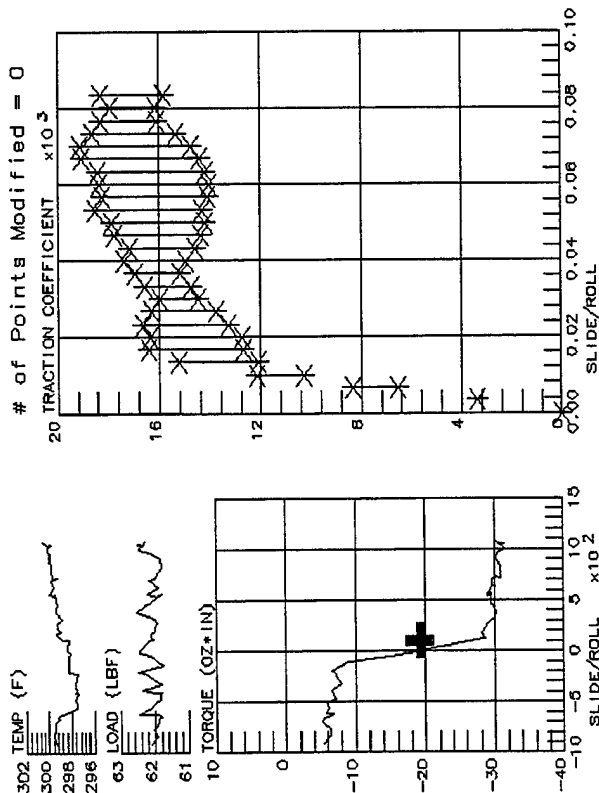
CM 93-172 PAO+16.5% 93-141 + Additives#139
300F 99LBF 310RPM 3 FILE: cm3001



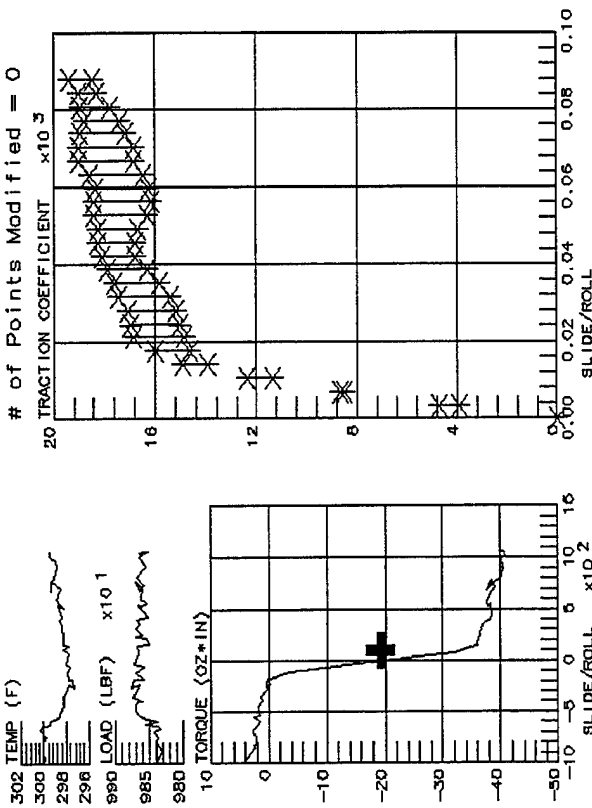
CM 93-172 PAO+16.5% 93-141 + Additives#140
300F 36LBF 660RPM 4 FILE: cm3001



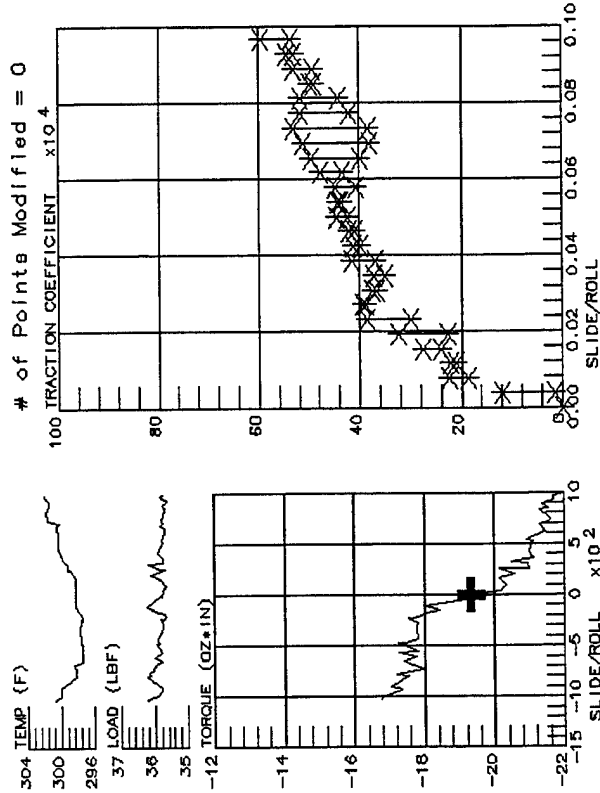
CM 93-172 PAO+16.5% 93-141 + Additives#141
300F 62LBF 660RPM 5 FILE: cm3001



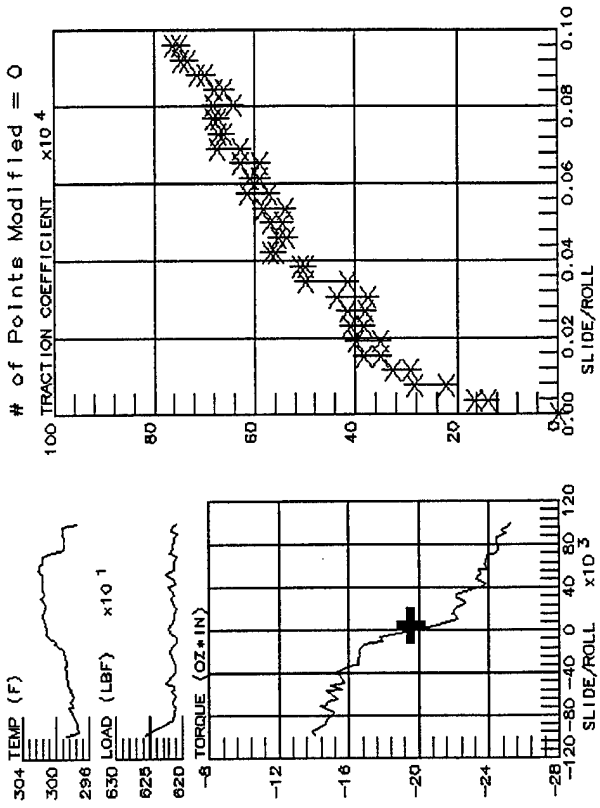
CM 93-172 PAO+16.5% 93-141 + Additives#142
300F 99LBF 660RPM 6 FILE: cm3001



CM 93-172 PAO+16.5% 93-141 + Additives#143
300F 36LBF 1281RPM 7 FILE: cm3001

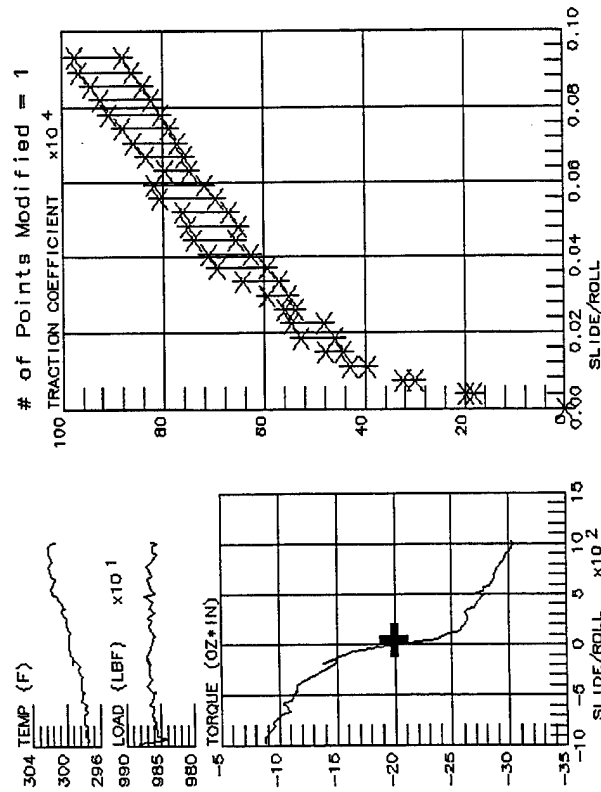


CM 93-172 PAO+16.5% 93-141 + Additives#144
300F 62LBF 1281RPM 8 FILE: cm3001



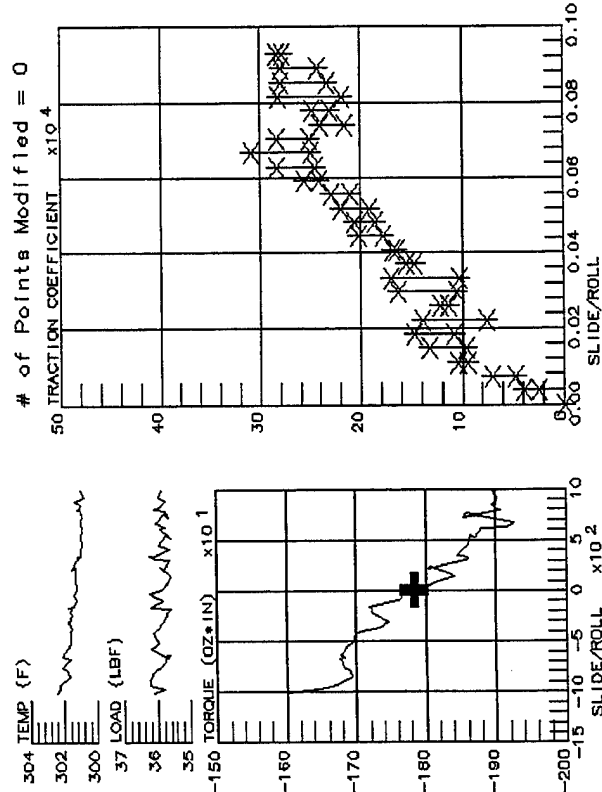
CM 93-172 PAO+16.5% 93-141 + Additives#145
300F 99LBF 1281RPM 9 FILE: cm3001

of Points Modified = 1



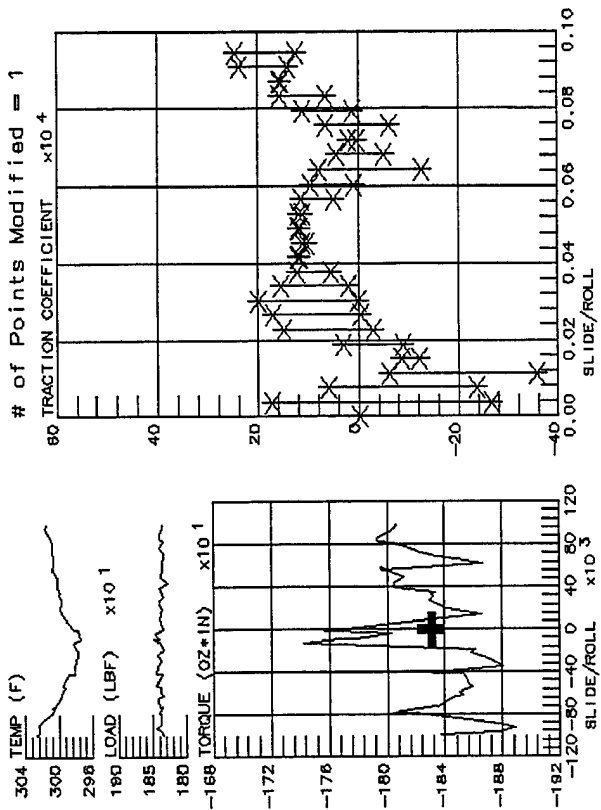
CM 93-172 PAO+16.5% 93-141 + Additives#147
300F 36LBF 2602RPM 2 FILE: cm300h

of Points Modified = 0



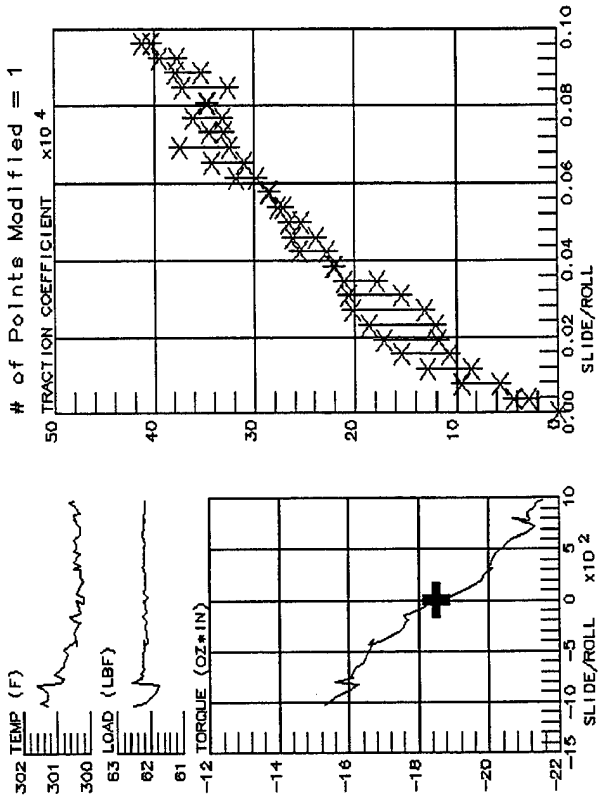
CM 93-172 PAO+16.5% 93-141 + Additives#148
300F 18LBF 2602RPM 1 FILE: cm300h

of Points Modified = 1

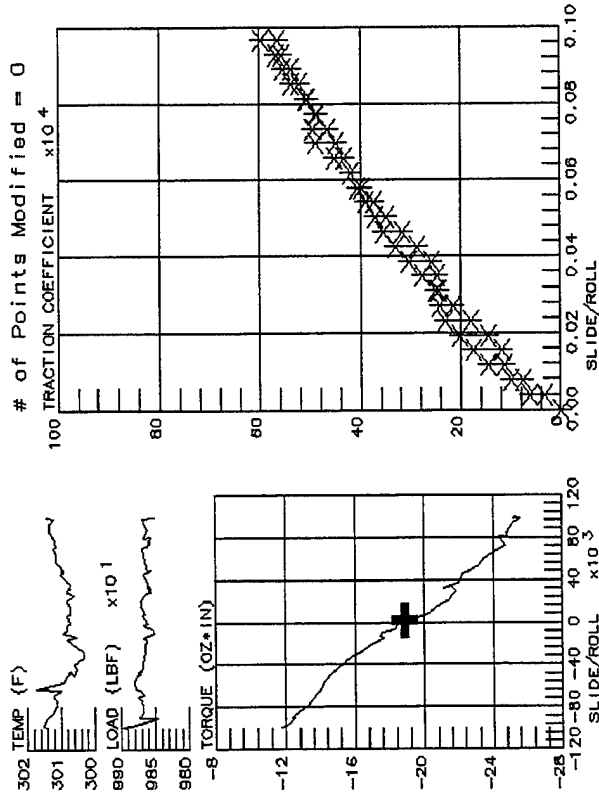


CM 93-172 PAO+16.5% 93-141 + Additives#148
300F 82LBF 2602RPM 3 FILE: cm300h

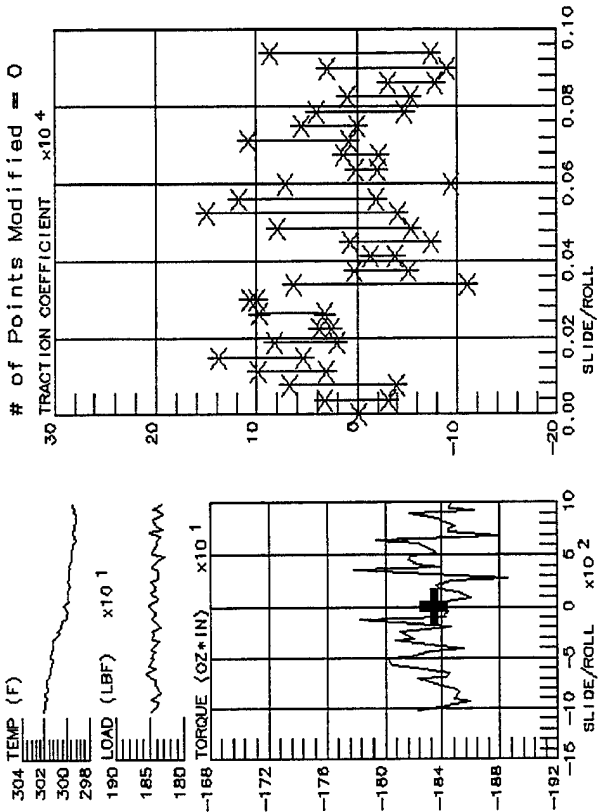
of Points Modified = 1



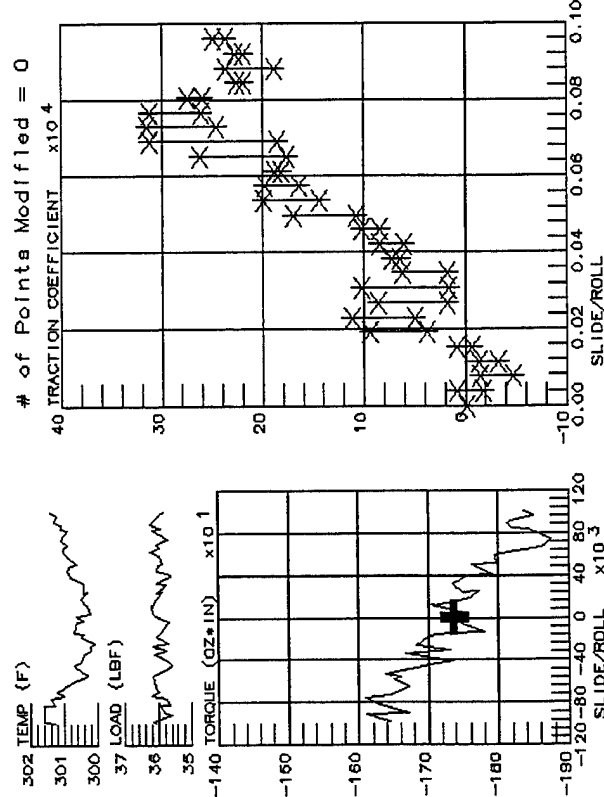
CM 93-172 PAO+16.5% 93-141 + Additives#149
300F 99LBF 2802RPM 4 FILE: cm300h



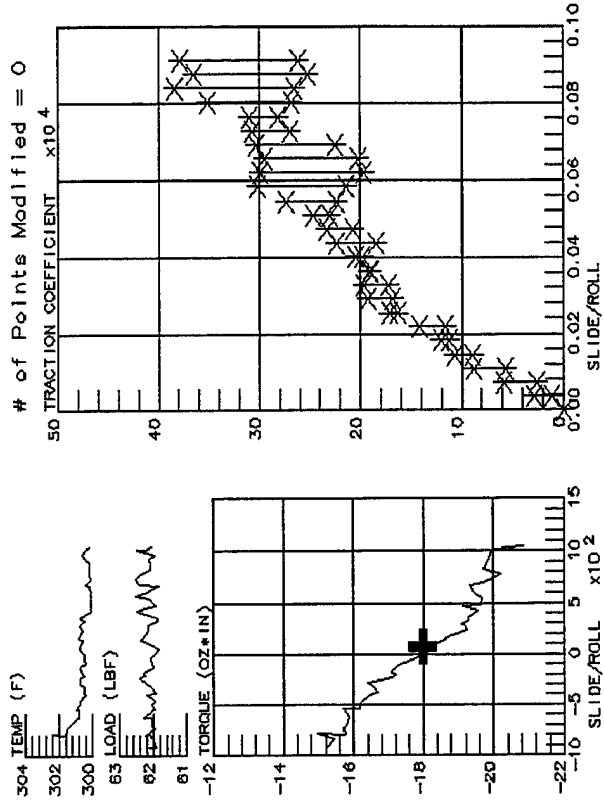
CM 93-172 PAO+16.5% 93-141 + Additives#150
300F 18LBF 5166RPM 5 FILE: cm300h



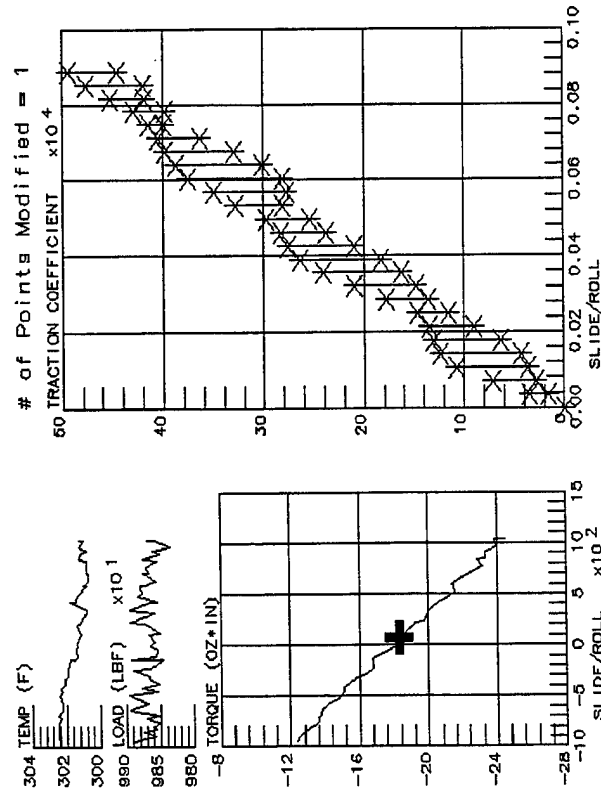
CM 93-172 PAO+16.5% 93-141 + Additives#151
300F 36LBF 5166RPM 6 FILE: cm300h



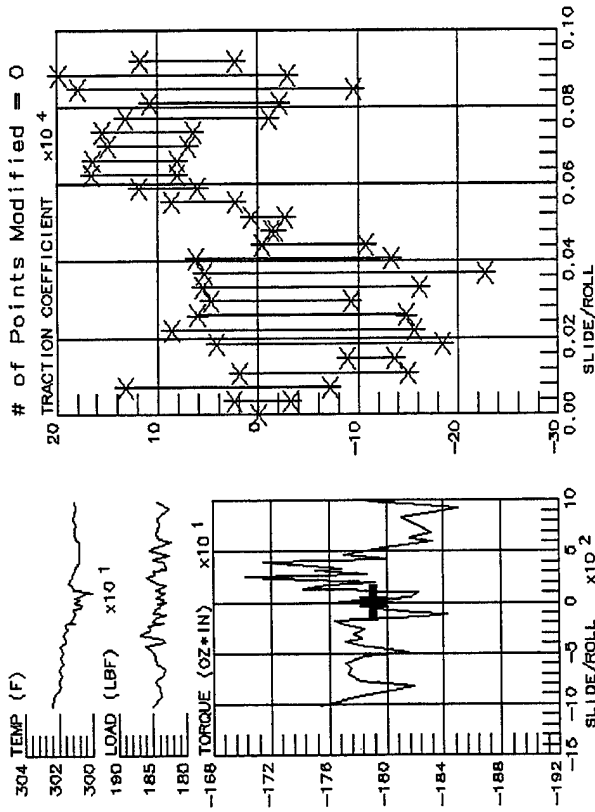
CM 93-172 PAO+16.5% 93-141 + Additives#152
300F 62LBF 5166RPM 7 FILE: cm300h



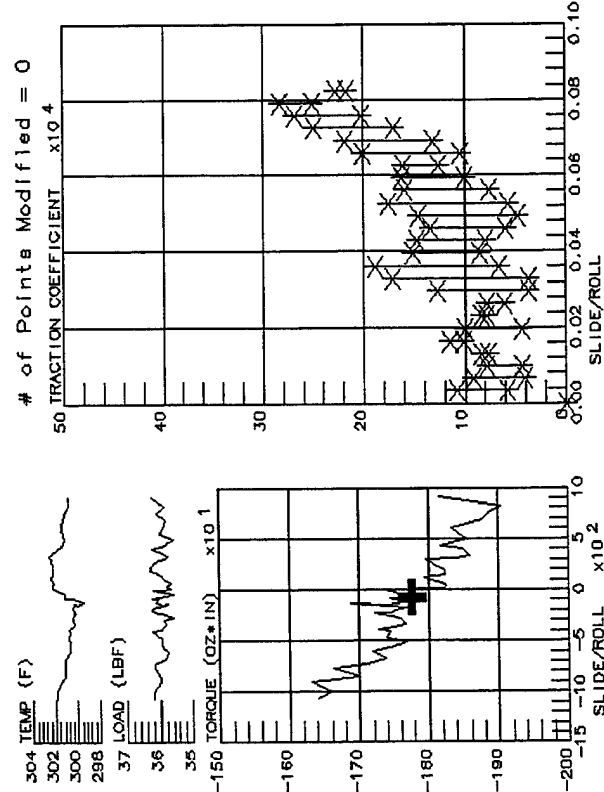
CM 93-172 PAO+16.5% 93-141 + Additives#153
300F 99LBF 5166RPM 8 FILE: cm300h



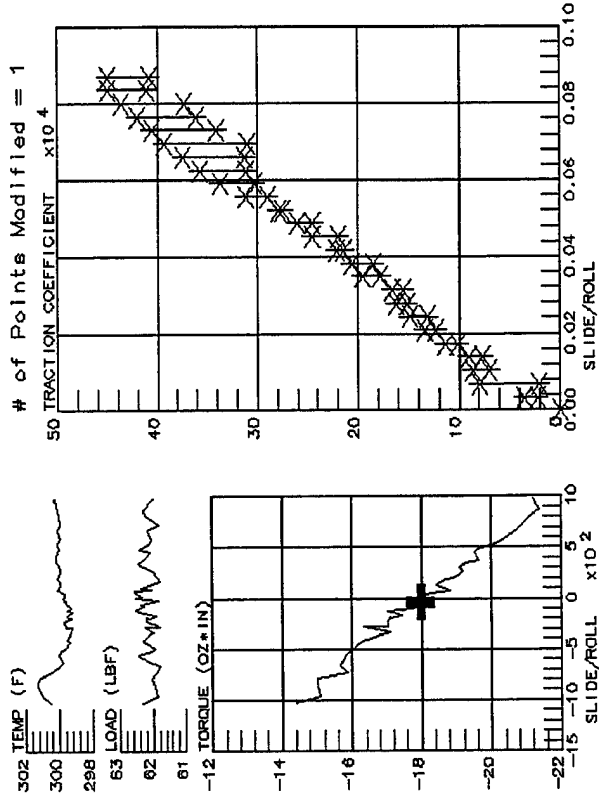
CM 93-172 PAO+16.5% 93-141 + Additives#154
300F 18LBF 7769RPM 9 FILE: cm300h



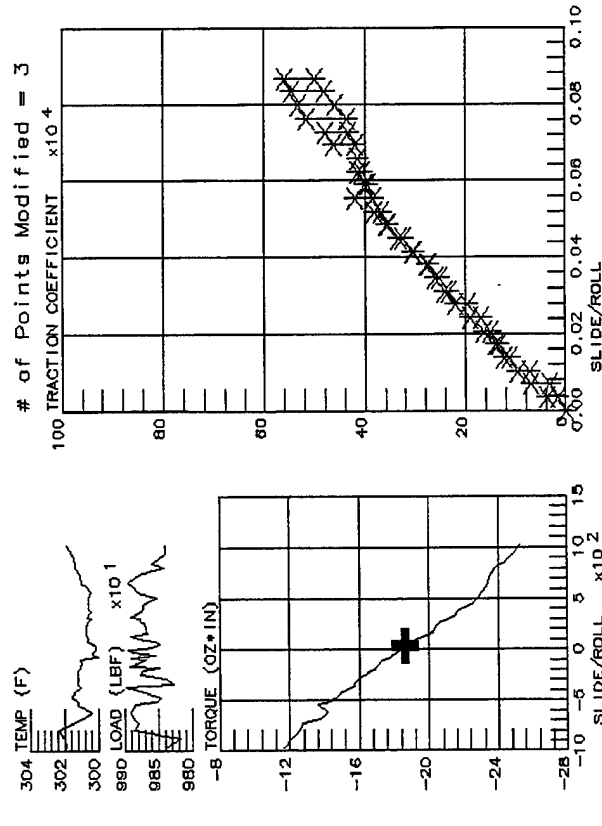
CM 93-172 PAO+16.5% 93-141 + Additives#155
300F 36LBF 7769RPM 10 FILE: cm300h



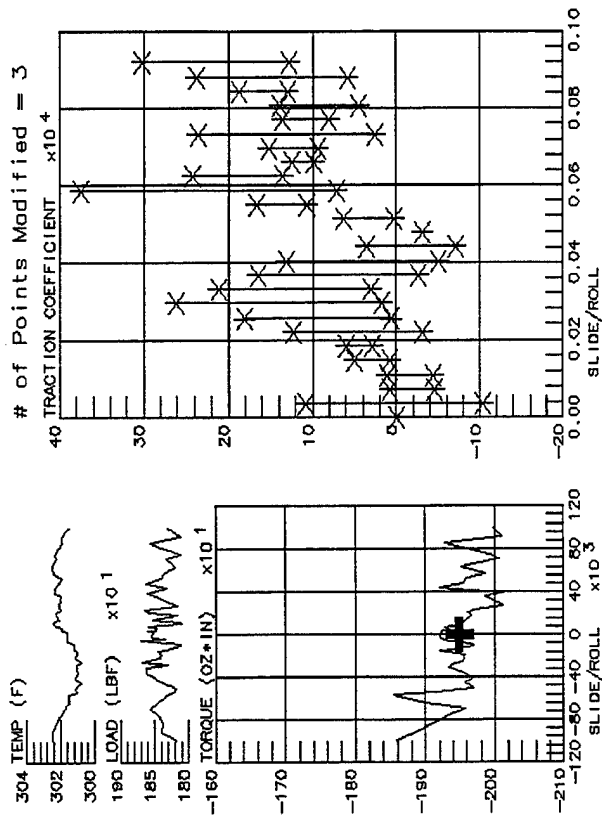
CM 93-172 PAO+16.5% 93-141 + Additives#156
300F 62LBF 7769RPM 11 FILE: cm300h



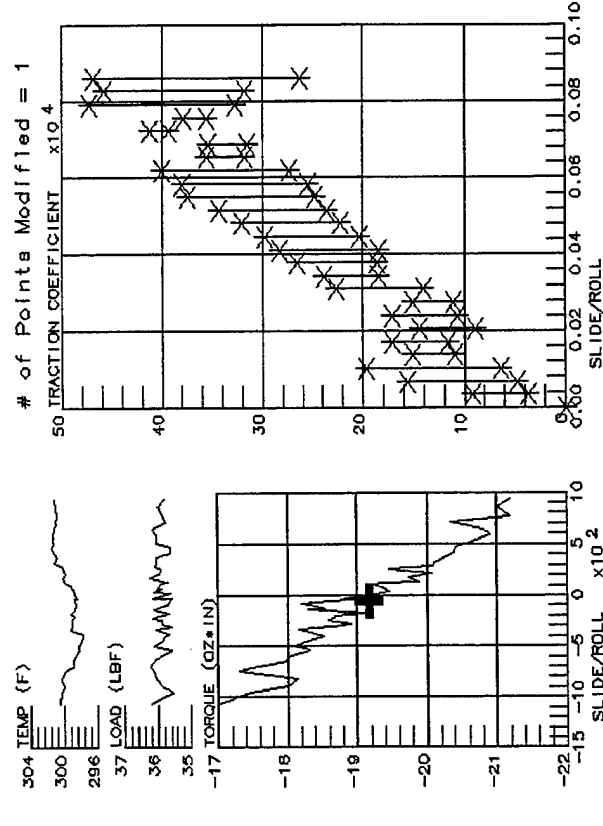
CM 93-172 PAO+16.5% 93-141 + Additives#157
300F 99LBF 7769RPM 12 FILE: cm300h



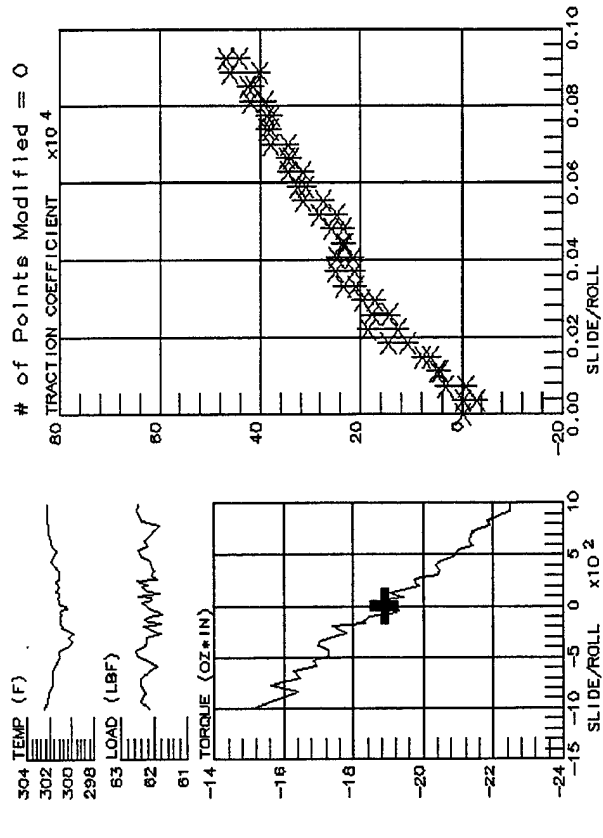
CM 93-172 PAO+16.5% 93-141 + Additives#158
300F 18LBF 10371RPM 13 FILE: cm300h



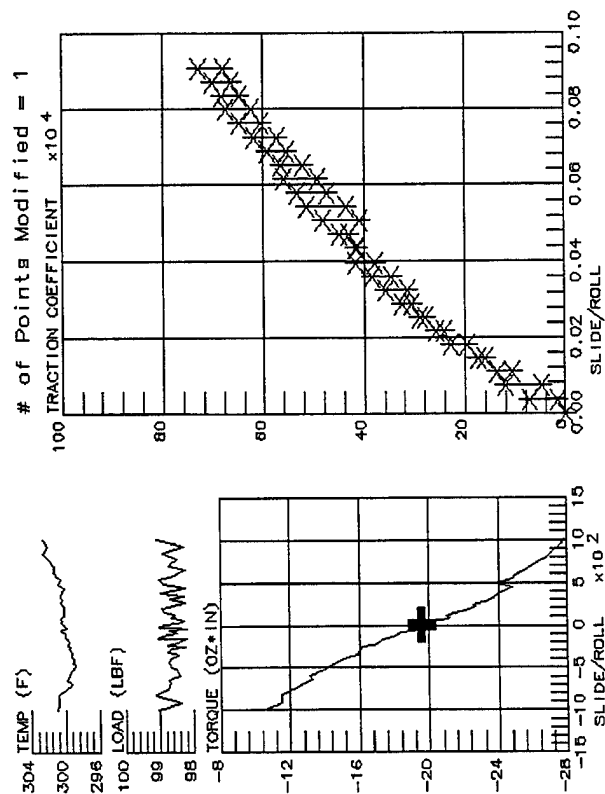
CM 93-172 PAO+16.5% 93-141 + Additives#159
300F 36LBF 10371RPM 14 FILE: cm300h



CM 93-172 PAO+16.5% 93-141 + Additives#160
300F 82LBF 10371RPM 15 FILE: cm300h



CM 93-172 PAO+16.5% 93-141 + Additives#161
 300F 99LBF 10371RPM 16 FILE: cm300h



Lubricant name = CM 93-172 PAO+16.5% 93-141 + Additives

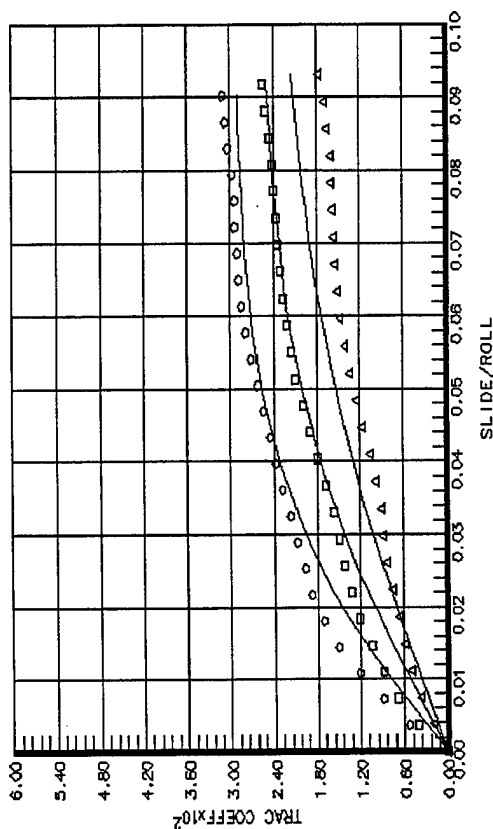
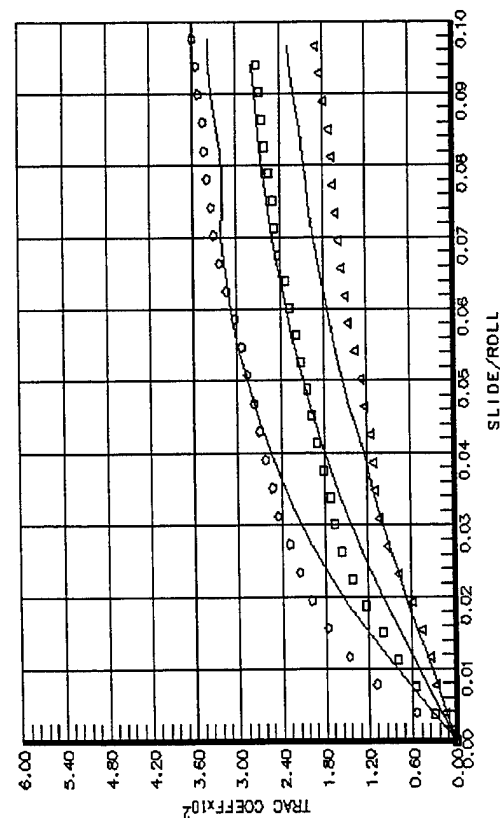
NEWTONIAN MODEL TYPE 1

| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| cm1.dat | 3.0000E+02 | 2.4703E+00 | 2.8124E+00 | 1.2000E-08 | 2.4576E-01 |
| cm2.dat | 3.0000E+02 | 5.0177E+00 | 1.9783E+00 | 1.2000E-08 | 1.2710E-01 |
| cm3.dat | 3.0000E+02 | 9.9622E+00 | 1.3729E+00 | 1.2000E-08 | 8.3533E-02 |
| cm4.dat | 3.0000E+02 | 1.4982E+01 | 1.0436E+00 | 1.2000E-08 | 6.7178E-02 |
| cm5.dat | 3.0000E+02 | 2.0000E+01 | 1.0687E+00 | 1.2000E-08 | 7.3343E-02 |
| cm6.dat | 3.1111E+02 | 2.4703E+00 | 1.5462E+00 | 1.2000E-08 | 3.3771E-01 |
| cm7.dat | 3.1111E+02 | 5.0177E+00 | 1.2401E+00 | 1.2000E-08 | 1.5944E-01 |
| cm8.dat | 3.1111E+02 | 9.9622E+00 | 8.3510E-01 | 1.2000E-08 | 9.0319E-02 |
| cm9.dat | 3.1111E+02 | 1.4982E+01 | 7.1521E-01 | 1.2000E-08 | 7.5653E-02 |
| cm10.dat | 3.1111E+02 | 2.0000E+01 | 8.2214E-01 | 1.2000E-08 | 8.6323E-02 |
| cm12.dat | 3.3889E+02 | 5.0177E+00 | 3.2954E-01 | 1.2000E-08 | 2.9494E-01 |
| cm13.dat | 3.3889E+02 | 9.9622E+00 | 2.1307E-01 | 1.2000E-08 | 1.2438E-01 |
| cm14.dat | 3.3889E+02 | 1.4982E+01 | 2.0647E-01 | 1.2000E-08 | 9.8464E-02 |
| cm15.dat | 3.3889E+02 | 2.0000E+01 | 3.0349E-01 | 1.2000E-08 | 1.3345E-01 |
| cm17.dat | 3.6667E+02 | 5.0177E+00 | 7.6527E-02 | 1.2000E-08 | 3.0662E-01 |
| cm18.dat | 3.6667E+02 | 9.9622E+00 | 5.9509E-02 | 1.2000E-08 | 1.7206E-01 |
| cm19.dat | 3.6667E+02 | 1.4982E+01 | 5.9892E-02 | 1.2000E-08 | 1.3702E-01 |
| cm20.dat | 3.6667E+02 | 2.0000E+01 | 8.4517E-02 | 1.2000E-08 | 1.7413E-01 |
| cm24.dat | 3.9444E+02 | 1.4982E+01 | 1.9807E-02 | 1.2000E-08 | 1.6523E-01 |
| cm25.dat | 3.9444E+02 | 2.0000E+01 | 3.0183E-02 | 1.2000E-08 | 2.3439E-01 |

CM 93-172 PAO+16.5% 93-141 + Additive
NEWTONIAN MODEL TYPE 1 cm2.dat

NEWTONIAN MODEL TYPE 1 cm2.dat

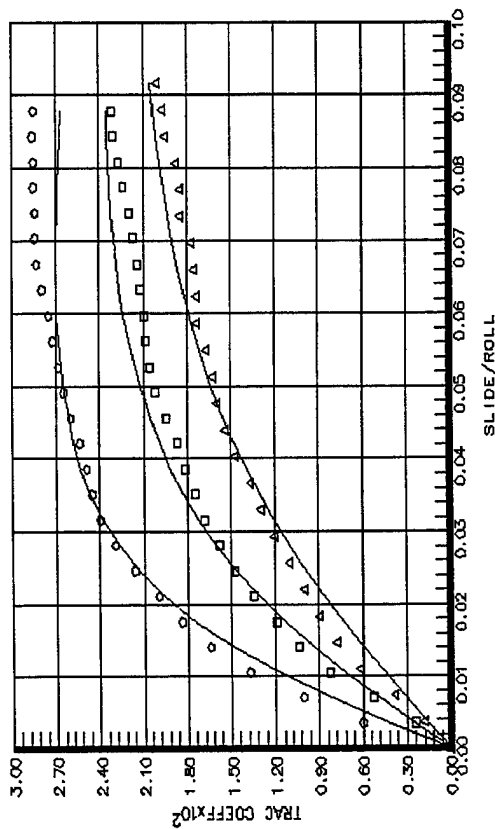
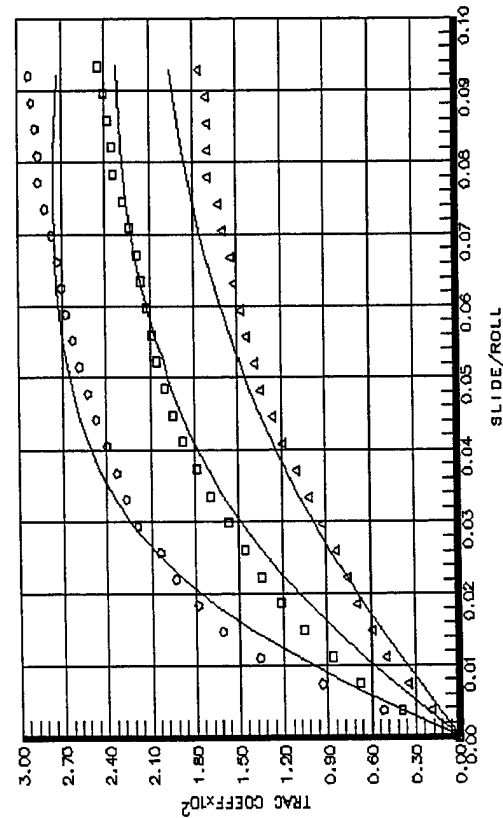
316MPa 160N 2.47M/S 300K # 6 2.812E+00 1.200E-08 2.488E-01 BETA*
378MPa 276N 2.47M/S 300K # 7 2.812E+00 1.200E-08 2.488E-01 ALFA*
442MPa 440N 2.47M/S 300K # 8 2.812E+00 1.200E-08 2.488E-01 XMU*
5.02M/S 300K # 14 1.978E+00 1.200E-08 1.271E-01 BETA*
5.02M/S 300K # 15 1.978E+00 1.200E-08 1.271E-01 ALFA*
5.02M/S 300K # 18 1.978E+00 1.200E-08 1.271E-01 XMU*



CM 93-172 PAO+16.5% 93-141 + Additive
NEWTONIAN MODEL TYPE 1 cm2.dat

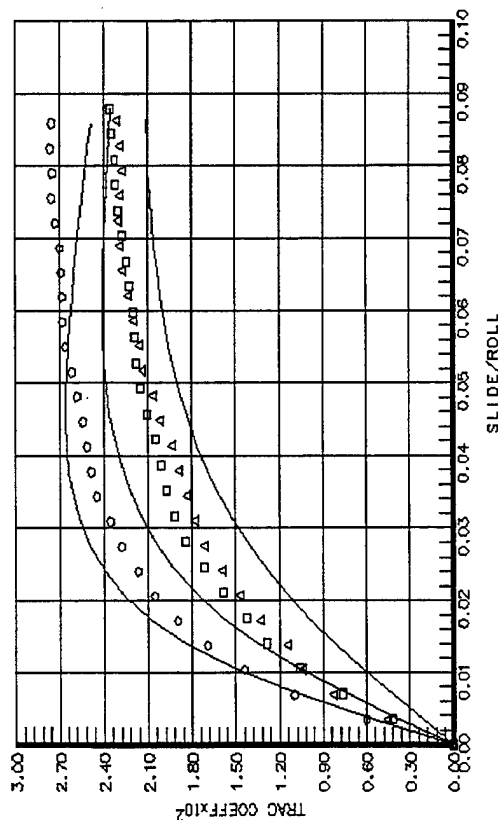
NEWTONIAN MODEL TYPE 1 cm2.dat

316MPa 160N 14.98M/S 300K # 22 1.044E+00 1.200E-08 6.718E-02 BETA*
378MPa 276N 14.98M/S 300K # 23 1.044E+00 1.200E-08 6.718E-02 ALFA*
442MPa 440N 14.98M/S 300K # 24 1.044E+00 1.200E-08 6.718E-02 XMU*



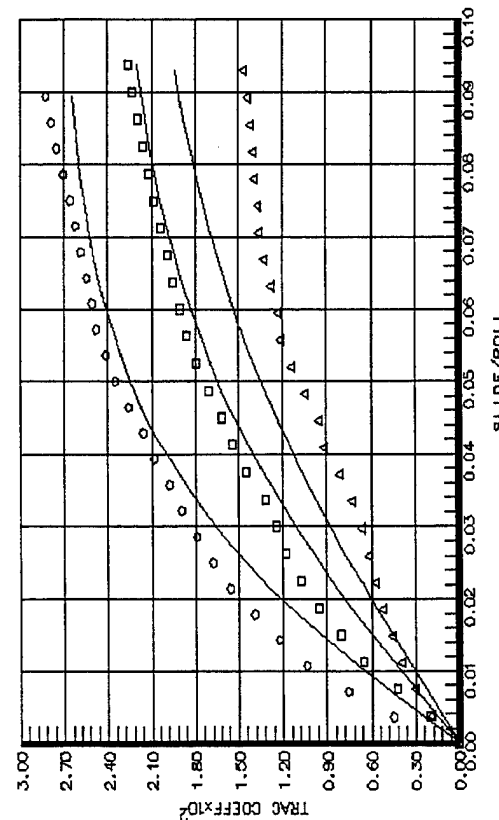
CM 93-172 PAO+16.5% 93-141 + Additives

| NEWTONIAN MODEL | TYPE 1 | cm5.dat | YMU* | ALFA* | BETA* | |
|-----------------|--------|----------|-----------|-----------|-----------|-----------|
| 4 | 316MPS | 20.00M/S | 300K # 28 | 1.069E+00 | 1.200E-08 | 7.334E-02 |
| □ | 379MPS | 20.00M/S | 300K # 27 | 1.069E+00 | 1.200E-08 | 7.334E-02 |
| ○ | 442MPS | 20.00M/S | 300K # 26 | 1.069E+00 | 1.200E-08 | 7.334E-02 |



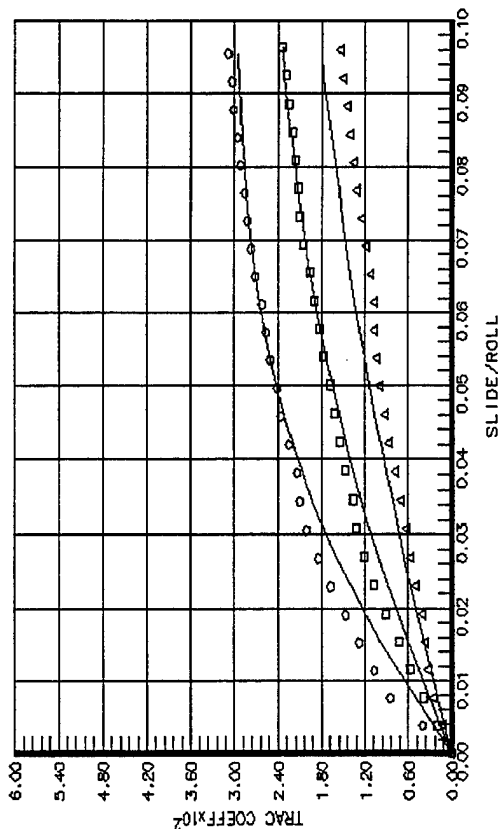
CM 93-172 PAO+16.5% 93-141 + Additives

| NEWTONIAN MODEL | TYPE 1 | cm5.dat | YMU* | ALFA* | BETA* | |
|-----------------|--------|---------|-----------|-----------|-----------|-----------|
| 4 | 316MPS | 9.96M/S | 311K # 48 | 8.351E-01 | 1.200E-08 | 9.032E-02 |
| □ | 379MPS | 9.96M/S | 311K # 47 | 8.351E-01 | 1.200E-08 | 9.032E-02 |
| ○ | 442MPS | 9.96M/S | 311K # 46 | 8.351E-01 | 1.200E-08 | 9.032E-02 |



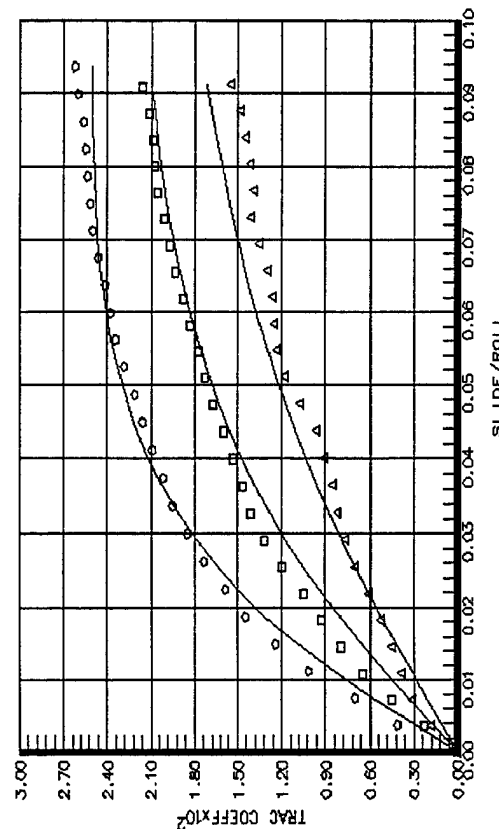
CM 93-172 PAO+16.5% 93-141 + Additives

| NEWTONIAN MODEL | TYPE 1 | cm8.dat | YMU* | ALFA* | BETA* | |
|-----------------|--------|---------|-----------|-----------|-----------|-----------|
| 4 | 316MPS | 2.47M/S | 311K # 38 | 1.546E+00 | 1.200E-08 | 3.377E-01 |
| □ | 379MPS | 2.47M/S | 311K # 39 | 1.546E+00 | 1.200E-08 | 3.377E-01 |
| ○ | 442MPS | 2.47M/S | 311K # 40 | 1.546E+00 | 1.200E-08 | 3.377E-01 |



CM 93-172 PAO+16.5% 93-141 + Additives

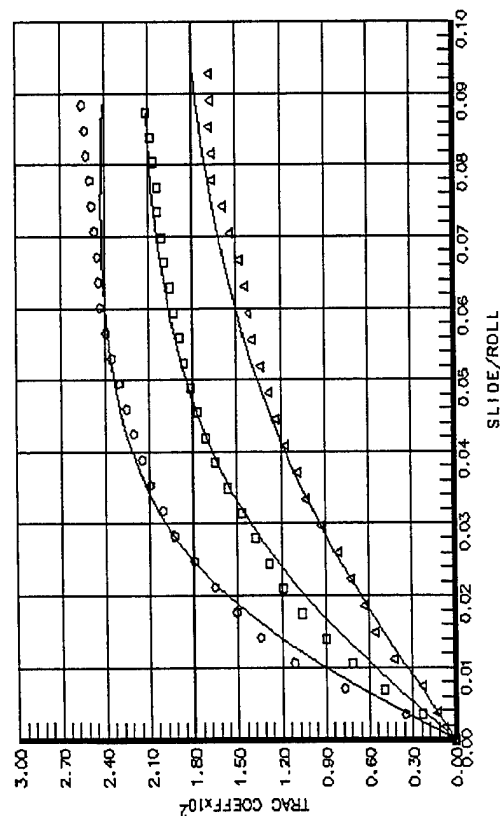
| NEWTONIAN MODEL | TYPE 1 | cm8.dat | YMU* | ALFA* | BETA* | |
|-----------------|--------|---------|-----------|-----------|-----------|-----------|
| 4 | 316MPS | 9.96M/S | 311K # 48 | 8.351E-01 | 1.200E-08 | 9.032E-02 |
| □ | 379MPS | 9.96M/S | 311K # 47 | 8.351E-01 | 1.200E-08 | 9.032E-02 |
| ○ | 442MPS | 9.96M/S | 311K # 46 | 8.351E-01 | 1.200E-08 | 9.032E-02 |



CM 93-172 PAO+16.5% 93-141 + Additives

NEWTONIAN MODEL TYPE 1 cm10.dat

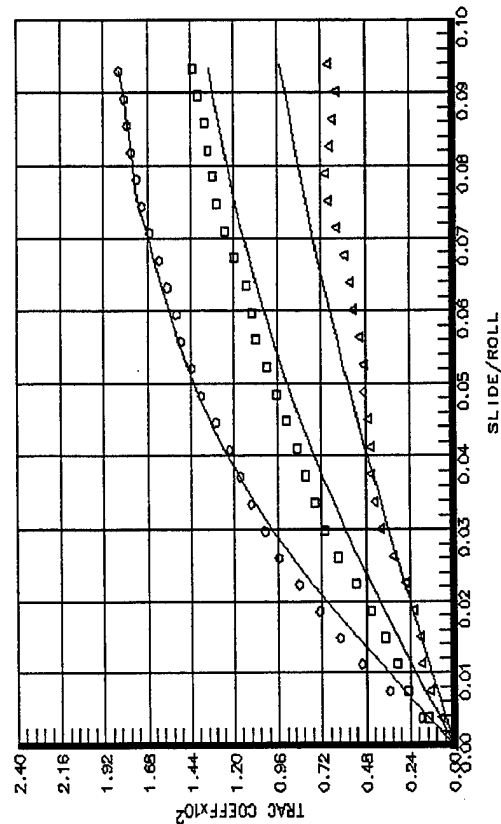
| NEWTONIAN MODEL | TYPE 1 | cm10.dat | ALFA* | BETA* |
|-----------------|--------|--------------------|-----------|-----------|
| Δ 318MPa | 160N | 14.98M/S 311K # 60 | 7.162E-01 | 7.588E-02 |
| □ 378MPa | 276N | 14.98M/S 311K # 51 | 7.162E-01 | 7.588E-02 |
| ○ 442MPa | 440N | 14.98M/S 311K # 52 | 7.162E-01 | 7.588E-02 |



CM 93-172 PAO+16.5% 93-141 + Additives

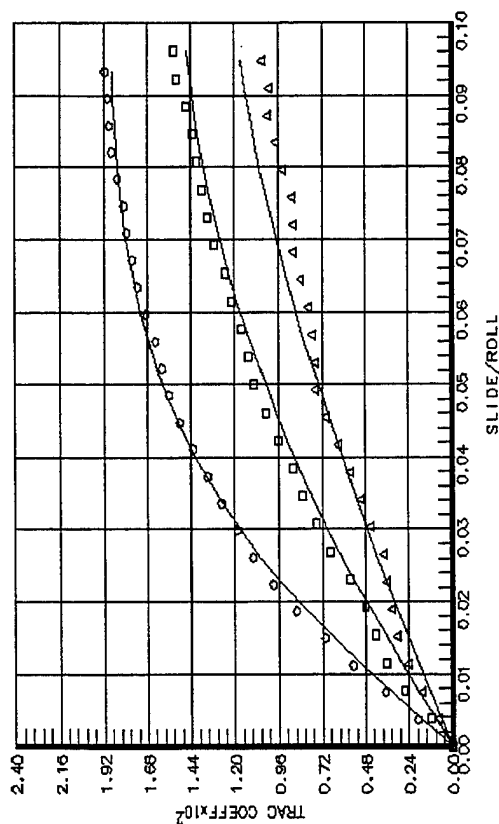
NEWTONIAN MODEL TYPE 1 cm13.dat

| NEWTONIAN MODEL | TYPE 1 | cm13.dat | ALFA* | BETA* |
|-----------------|--------|-------------------|-----------|-----------|
| Δ 318MPa | 160N | 9.86M/S 339K # 72 | 2.131E-01 | 1.244E-01 |
| □ 378MPa | 276N | 9.86M/S 339K # 73 | 2.131E-01 | 1.244E-01 |
| ○ 442MPa | 440N | 9.86M/S 339K # 74 | 2.131E-01 | 1.244E-01 |



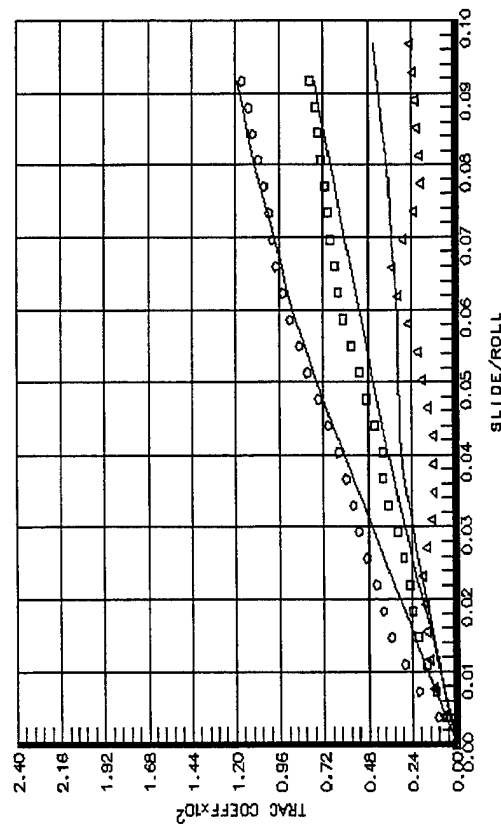
| CM 93-172 | PAO+16.5% | 93-141 | + Additives | CM 93-172 | PAO+16.5% | 93-141 | + Additive |
|-----------------|-----------|----------|-------------|-----------------|-----------|----------|------------|
| NEWTONIAN MODEL | | TYPE 1 | | NEWTONIAN MODEL | | TYPE 1 | |
| cm14.dat | | cm16.dat | | cm14.dat | | cm16.dat | |
| CM 93-172 | PAO+16.5% | 93-141 | + Additives | CM 93-172 | PAO+16.5% | 93-141 | + Additive |

CM 93-172 PA0+16.5% 93-141 + Additive
NEWTONIAN MODEL TYPE 1 cm14.dat

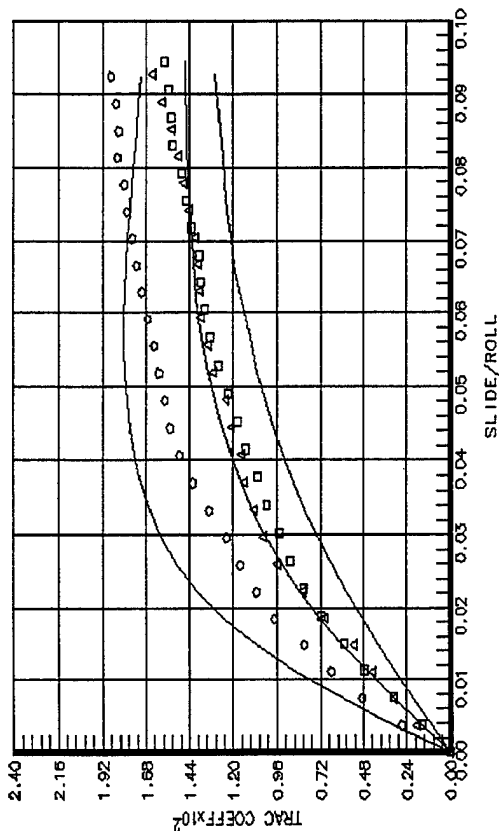
[illegible]

| CM 93-172 | PAO+16.5% | 93-141 | 93-172 | PAO+16.5% | 93-141 | + Additive |
|-----------------|-----------|----------------------|-----------------|-----------|----------------------|------------|
| NEWTONIAN MODEL | TYPE 1 | cm ¹² dat | NEWTONIAN MODEL | TYPE 1 | cm ¹² dat | |
| CM 93-172 | PAO+16.5% | 93-141 | 93-172 | PAO+16.5% | 93-141 | + Additive |

| | | | XMU* | ALFA* | BETA* |
|--------|------|----------|-----------|-----------|-----------|
| 318NPA | 160N | 5.02M/\$ | 367K # 93 | 7.653E-02 | 1.200E-08 |
| 379NPA | 276N | 5.02M/\$ | 367K # 94 | 7.653E-02 | 1.200E-08 |
| 442NPA | 440N | 5.02M/\$ | 367K # 95 | 7.653E-02 | 1.200E-08 |

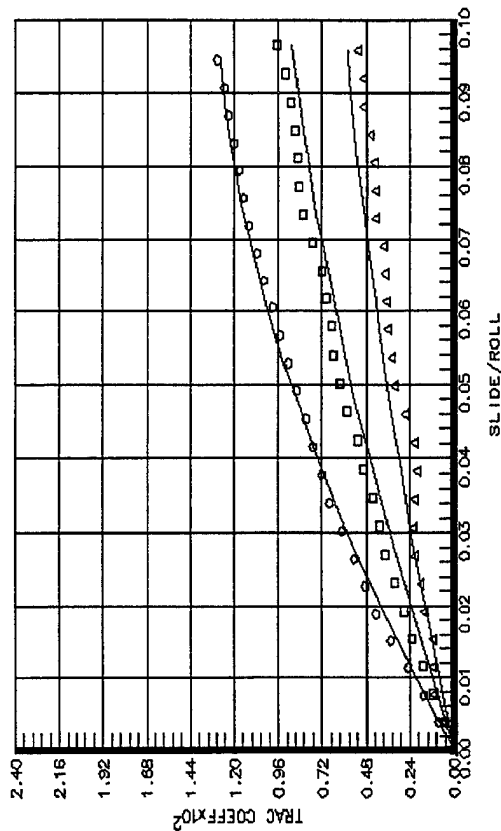


CM 93-172 PAO+16.5% 93-141 + Additive
NEWTONIAN MODEL TYPE 1 cm16.dat

[illegible]

CM 93-172 PAO+16.5% 93-141 + Additive
NEWTONIAN MODEL TYPE 1 cm18.dat

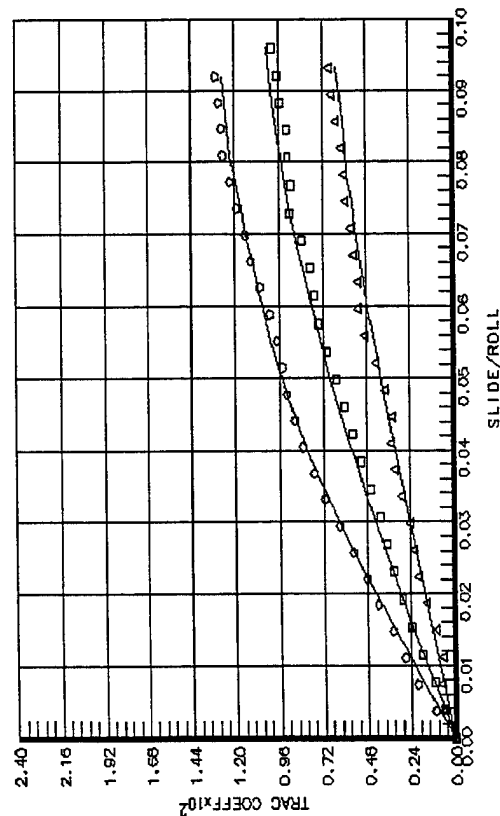
| | | XMU* | ALFA* | BETA* | | |
|--------|------|---------|-----------|-----------|-----------|-----------|
| 316MPa | 160N | 9.96M/S | 367K # 86 | 5.951E-02 | 1.200E-08 | 1.721E-01 |
| 378MPa | 276N | 9.96M/S | 367K # 97 | 5.951E-02 | 1.200E-08 | 1.721E-01 |
| 442MPa | 440N | 9.96M/S | 367K # 98 | 5.951E-02 | 1.200E-08 | 1.721E-01 |



CM 93-172 PAO+16.5% 93-141 + Additives
 NEWTONIAN MODEL TYPE 1 cm19.dat

| NEWTONIAN MODEL | TYPE 1 | cm19.dat | ALFA* | BETA* |
|-----------------|--------------------|-----------|-----------|-----------|
| 160N | 14.98M/S 367K # 99 | 5.989E-02 | 1.200E-08 | 1.370E-01 |
| 276N | 14.98M/S 367K #100 | 5.989E-02 | 1.200E-08 | 1.370E-01 |
| 440N | 14.98M/S 367K #101 | 5.989E-02 | 1.200E-08 | 1.370E-01 |

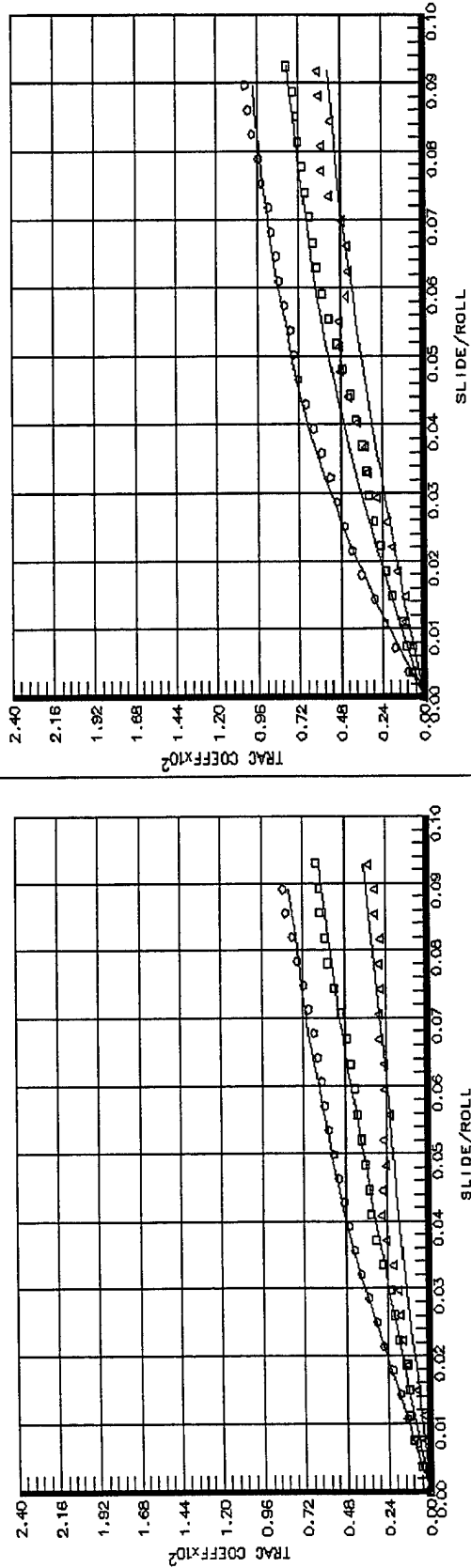
ALFA* 1.200E-08 1.200E-08 1.200E-08
 BETA* 1.370E-01 1.370E-01 1.370E-01



CM 93-172 PAO+16.5% 93-141 + Additives
 NEWTONIAN MODEL TYPE 1 cm25.dat

| NEWTONIAN MODEL | TYPE 1 | cm25.dat | ALFA* | BETA* |
|-----------------|--------------------|-----------|-----------|-----------|
| 160N | 20.00M/S 394K #134 | 3.018E-02 | 1.200E-08 | 2.344E-01 |
| 276N | 20.00M/S 394K #135 | 3.018E-02 | 1.200E-08 | 2.344E-01 |
| 440N | 20.00M/S 394K #136 | 3.018E-02 | 1.200E-08 | 2.344E-01 |

ALFA* 1.200E-08 1.200E-08 1.200E-08
 BETA* 2.344E-01 2.344E-01 2.344E-01



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8. Traction Data Set G: 84-473 95% PAO + 5% Bardahl

Data set name: AJ 84-473 95% PAO + 5% Bardahl
 Rolling radii [Disks 1 & 2] (in): 0.54 0.54
 Crown radii [Disks 1 & 2] (in): 38.27 37.70

Number of data sets found = 42

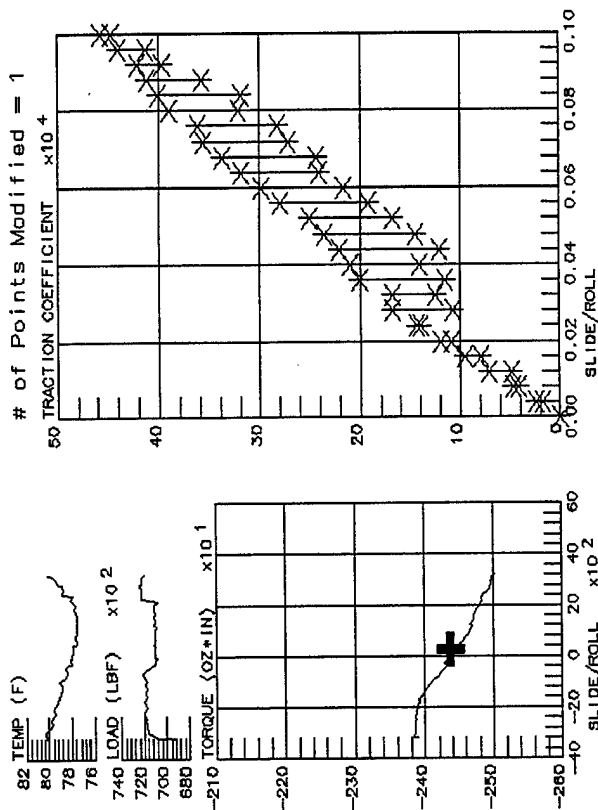
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Points | Dataset/Test # |
|----|-----------|-------------|---------|---------|---------|--------|----------------|
| 1 | 77.00 | 4.90 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #1 |
| 2 | 77.00 | 7.03 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #2 |
| 3 | 77.00 | 9.16 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #3 |
| 4 | 77.00 | 10.58 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #4 |
| 5 | 77.00 | 11.29 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #5 |
| 6 | 77.00 | 13.42 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #6 |
| 7 | 77.00 | 16.26 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #7 |
| 8 | 77.00 | 4.90 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #8 |
| 9 | 77.00 | 7.03 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #9 |
| 10 | 77.00 | 9.16 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #10 |
| 11 | 77.00 | 10.58 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #11 |
| 12 | 77.00 | 11.29 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #12 |
| 13 | 77.00 | 13.42 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #13 |
| 14 | 77.00 | 16.26 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #14 |
| 15 | 77.00 | 4.90 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #15 |
| 16 | 77.00 | 7.03 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #16 |
| 17 | 77.00 | 9.16 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #17 |
| 18 | 77.00 | 10.58 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #18 |
| 19 | 77.00 | 11.29 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #19 |
| 20 | 77.00 | 13.42 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #20 |
| 21 | 77.00 | 16.26 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #21 |
| 22 | 100.00 | 4.90 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #22 |
| 23 | 100.00 | 7.03 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #23 |
| 24 | 100.00 | 9.16 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #24 |
| 25 | 100.00 | 10.58 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #25 |
| 26 | 100.00 | 11.29 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #26 |
| 27 | 100.00 | 13.42 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #27 |
| 28 | 100.00 | 16.26 | 250.00 | 350.00 | 300.00 | 49 | 84-473aj #28 |
| 29 | 100.00 | 4.90 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #29 |
| 30 | 100.00 | 7.03 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #30 |
| 31 | 100.00 | 9.16 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #31 |
| 32 | 100.00 | 10.58 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #32 |
| 33 | 100.00 | 11.29 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #33 |
| 34 | 100.00 | 13.42 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #34 |
| 35 | 100.00 | 16.26 | 500.00 | 700.00 | 600.00 | 49 | 84-473aj #35 |
| 36 | 100.00 | 4.90 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #36 |
| 37 | 100.00 | 7.03 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #37 |
| 38 | 100.00 | 9.16 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #38 |
| 39 | 100.00 | 10.58 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #39 |
| 40 | 100.00 | 11.29 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #40 |
| 41 | 100.00 | 13.42 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #41 |
| 42 | 100.00 | 16.26 | 1000.00 | 1400.00 | 1200.00 | 49 | 84-473aj #42 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # | | | |
|----------|--------|---------|-------------|----|----|----|
| aj1.dat | 77.00 | 300.00 | 3 | 5 | 6 | 7 |
| aj2.dat | 77.00 | 600.00 | 10 | 12 | 13 | 14 |
| aj3.dat | 77.00 | 1200.00 | 17 | 19 | 20 | 21 |
| aj4.dat | 100.00 | 300.00 | 24 | 26 | 27 | 28 |
| aj5.dat | 100.00 | 600.00 | 31 | 33 | 34 | 35 |
| aj6.dat | 100.00 | 1200.00 | 38 | 40 | 41 | 42 |

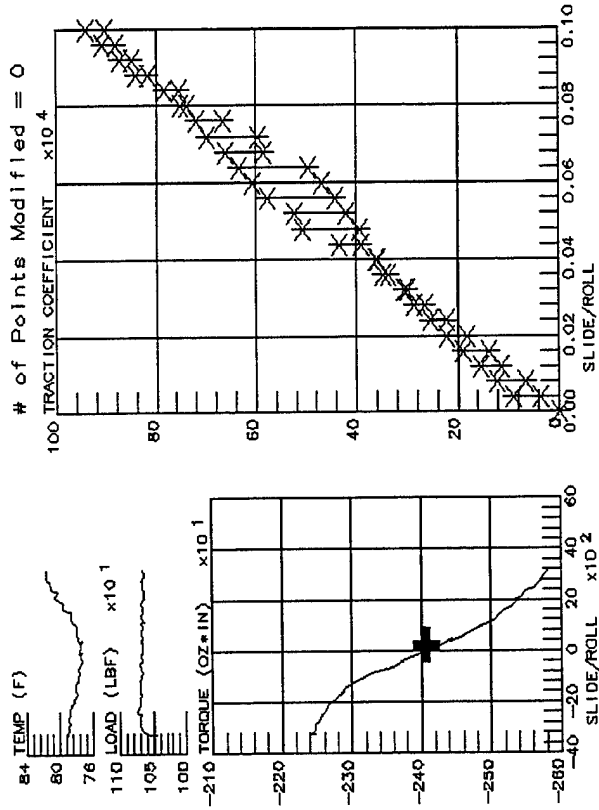
AJ 84-473 95% PAO + 5% Bardahl
77F 5LBF 300RPM 1 FILE: 84-473aJ

#1
of Points Modified = 2



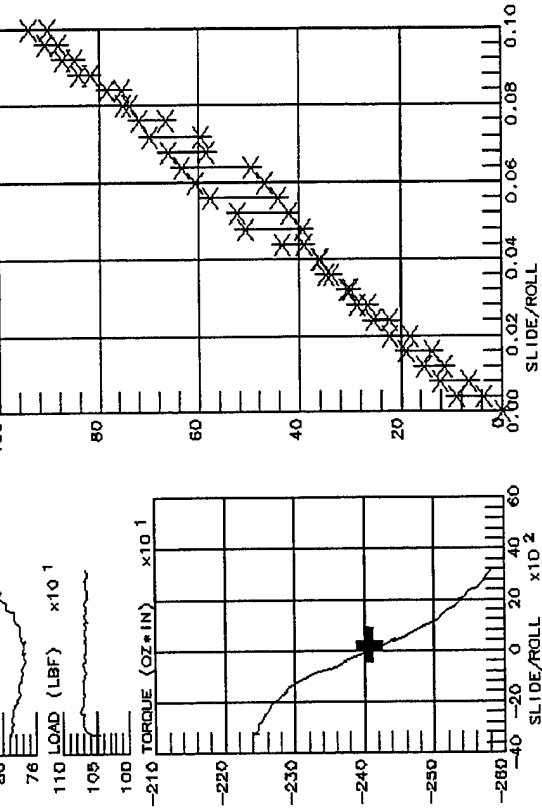
AJ 84-473 95% PAO + 5% Bardahl
77F 11LBF 300RPM 4 FILE: 84-473aJ

#3
of Points Modified = 0



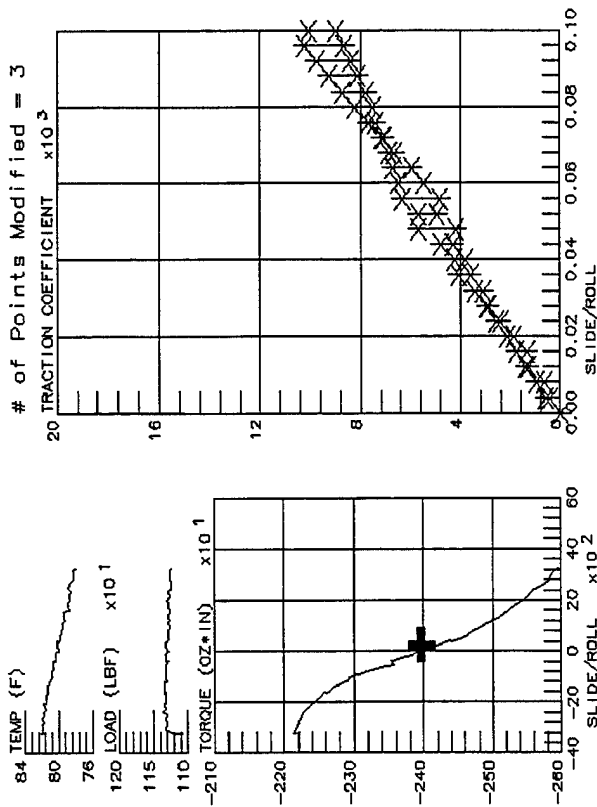
AJ 84-473 95% PAO + 5% Bardahl
77F 9LBF 300RPM 3 FILE: 84-473aJ

#4
of Points Modified = 0

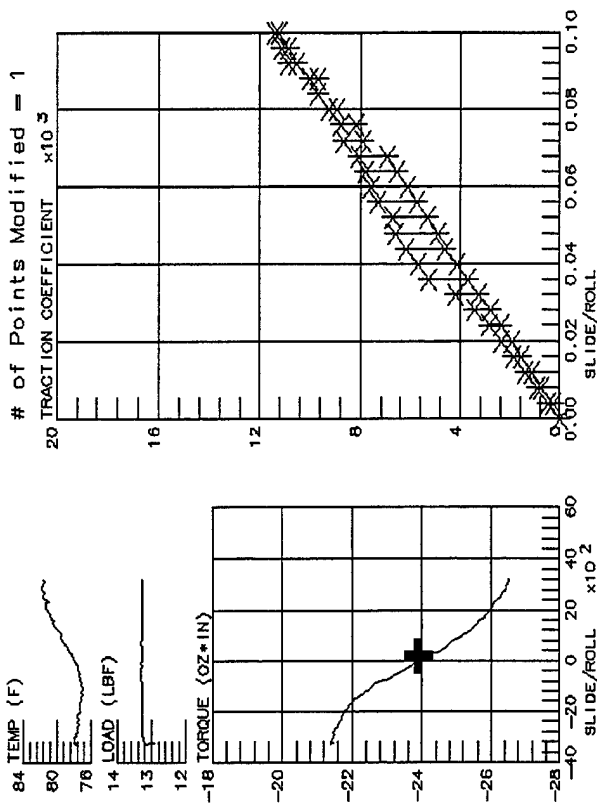


TRACTION MEASUREMENTS

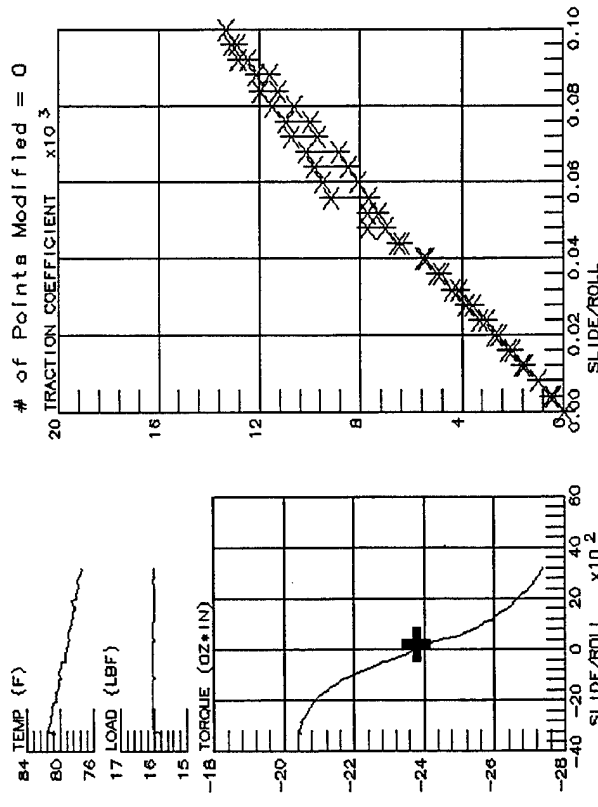
AJ 84-473 95% PAO + 5% Bardahl #5
77F 11LBF 300RPM 5 FILE: 84-473aj



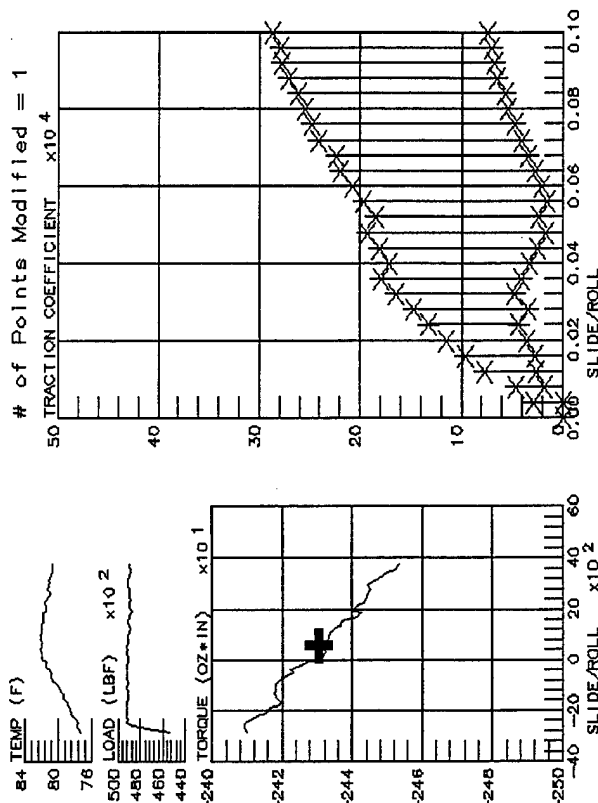
AJ 84-473 95% PAO + 5% Bardahl #8
77F 13LBF 300RPM 6 FILE: 84-473aj



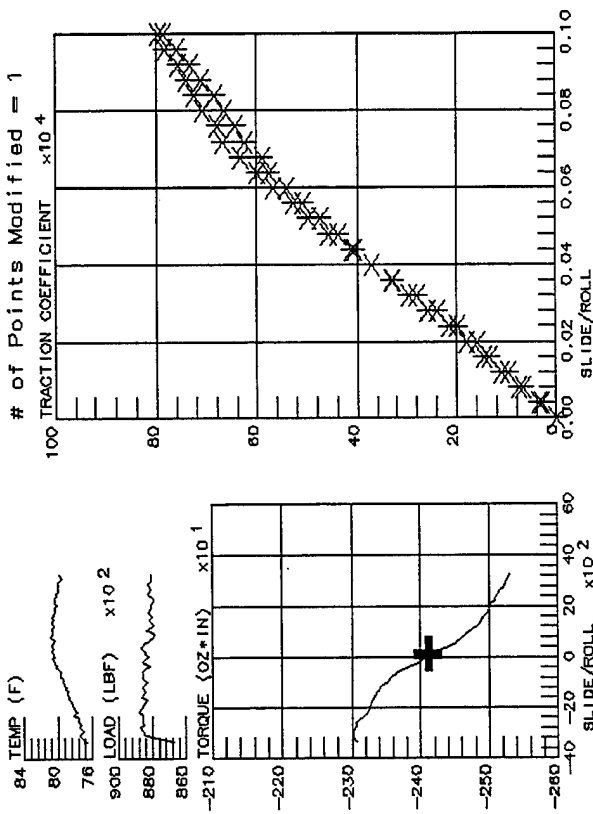
AJ 84-473 95% PAO + 5% Bardahl #7
77F 16LBF 300RPM 7 FILE: 84-473aj



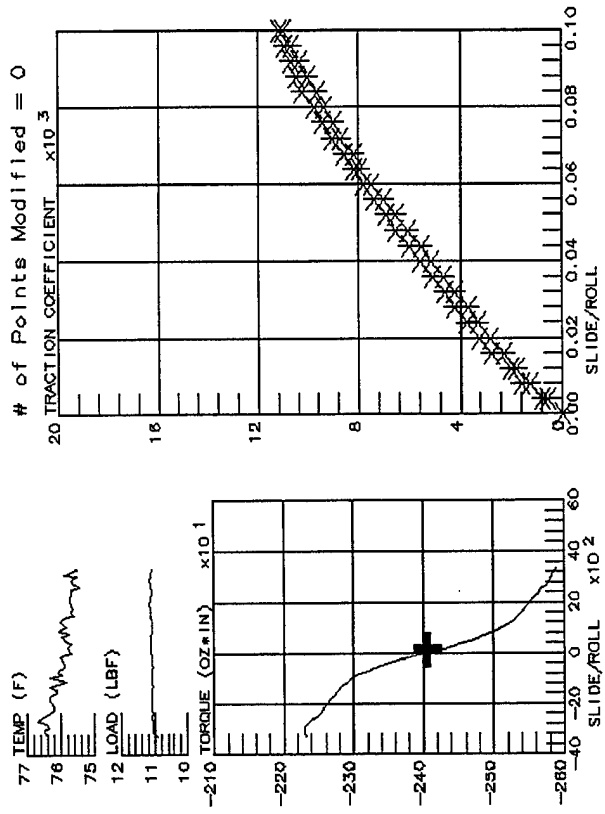
AJ 84-473 95% PAO + 5% Bardahl #8
77F 5LBF 600RPM 8 FILE: 84-473aj



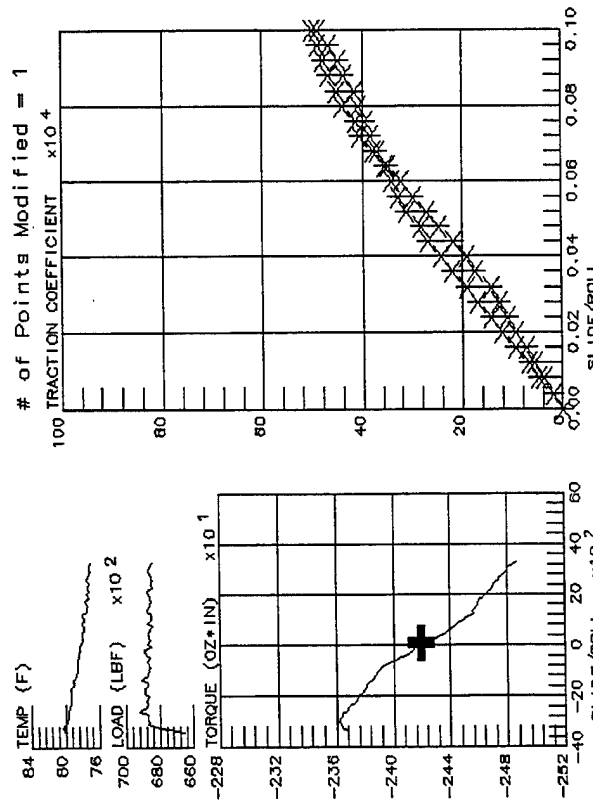
AJ 84-473 95% PAO + 5% Bardahl #10
77F 9LBF 600RPM 10 FILE: 84-473aj



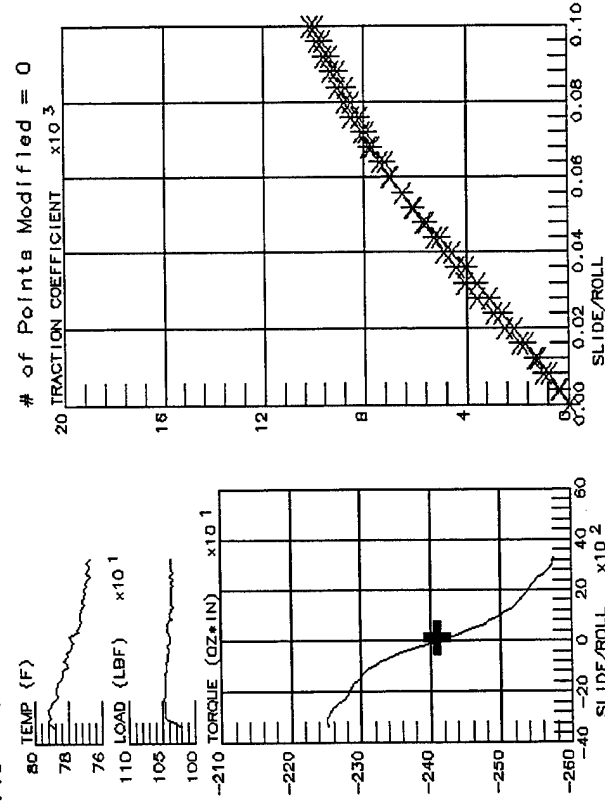
AJ 84-473 95% PAO + 5% Bardahl #12
77F 11LBF 600RPM 12 FILE: 84-473aj



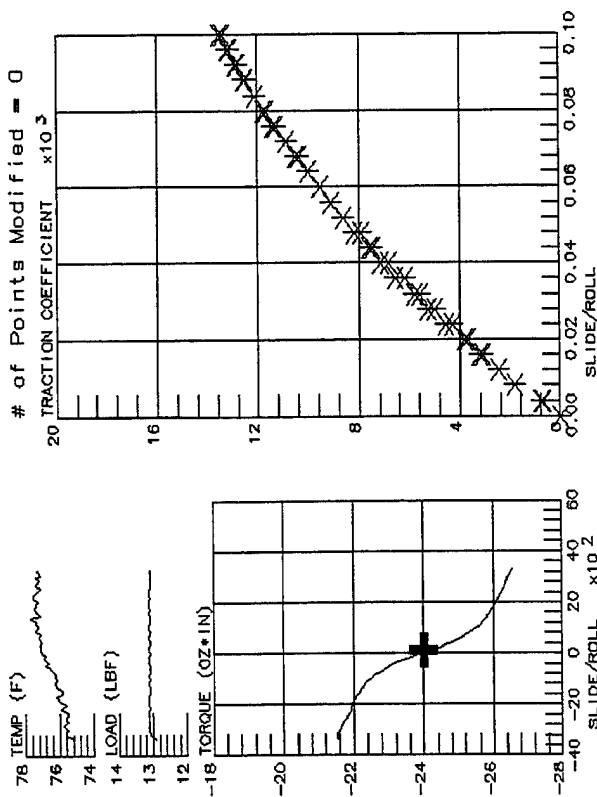
AJ 84-473 95% PAO + 5% Bardahl #9
77F 7LBF 600RPM 9 FILE: 84-473aj



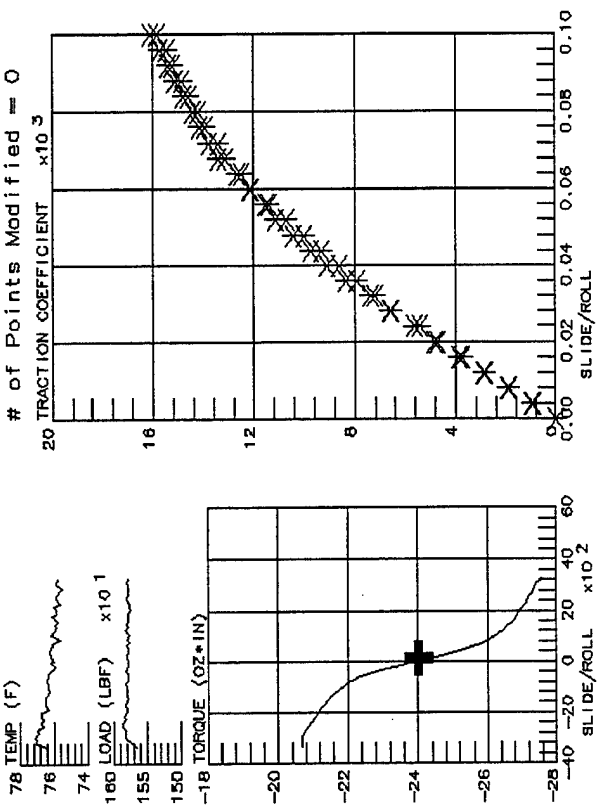
AJ 84-473 95% PAO + 5% Bardahl #11
77F 11LBF 600RPM 11 FILE: 84-473aj



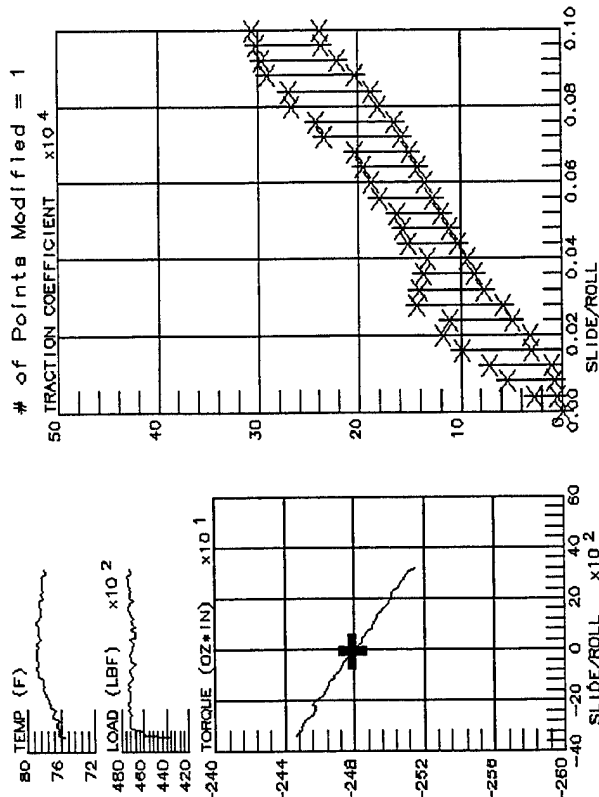
AJ 84-473 95% PAO + 5% Bardahl #13
77F 13LBF 600RPM 13 FILE: 84-473aj



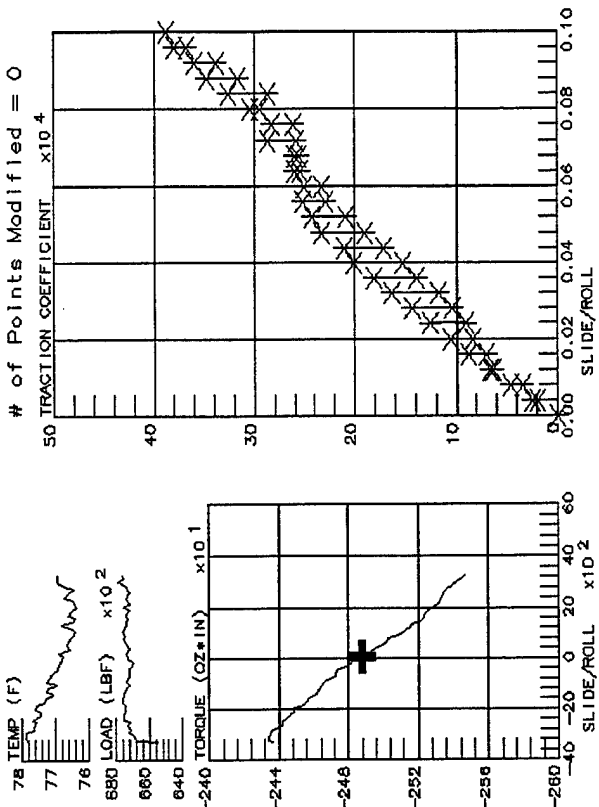
AJ 84-473 95% PAO + 5% Bardahl #14
77F 16LBF 600RPM 14 FILE: 84-473aj



AJ 84-473 95% PAO + 5% Bardahl #15
77F 5LBF 1200RPM 15 FILE: 84-473aj

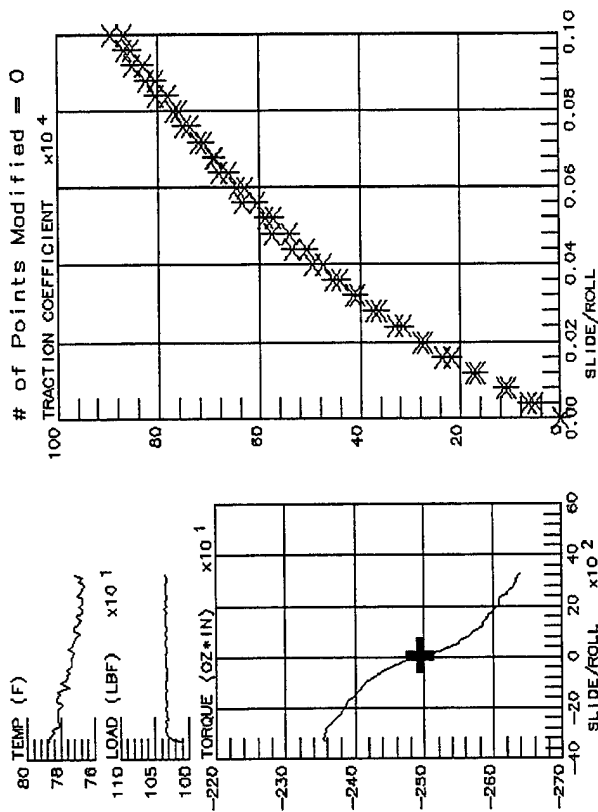


AJ 84-473 95% PAO + 5% Bardahl #16
77F 7LBF 1200RPM 16 FILE: 84-473aj



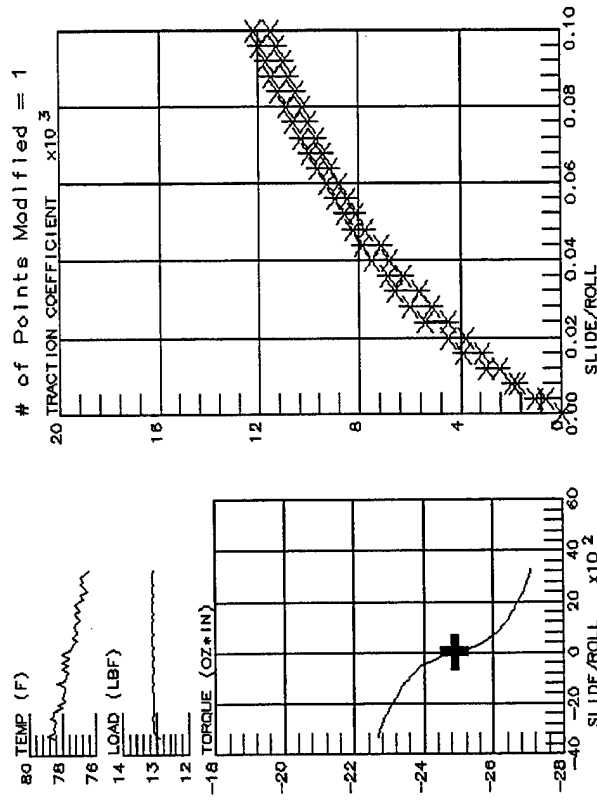
AJ 84-473 95% PAO + 5% Bardahl
77F 11LBF 1200RPM 18 FILE: 84-473aj #18

of Points Modified = 0



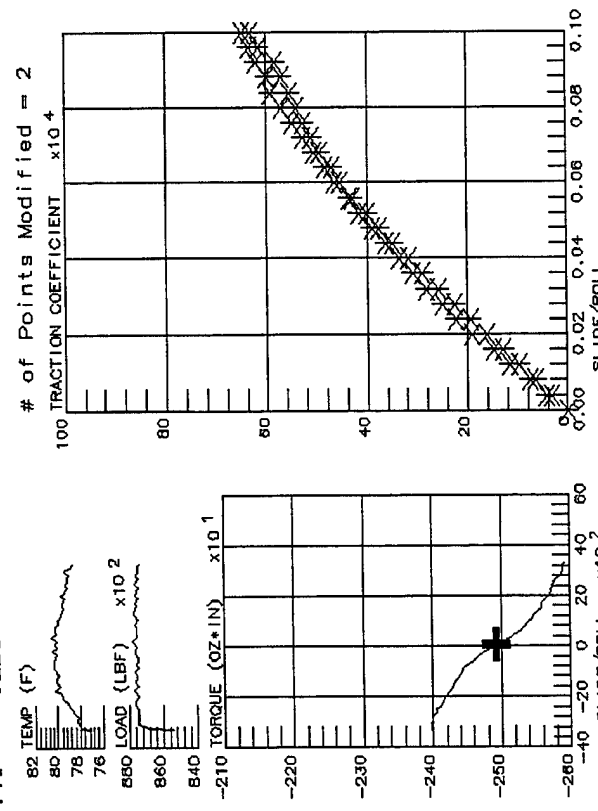
AJ 84-473 95% PAO + 5% Bardahl
77F 13LBF 1200RPM 20 FILE: 84-473aj #20

of Points Modified = 1



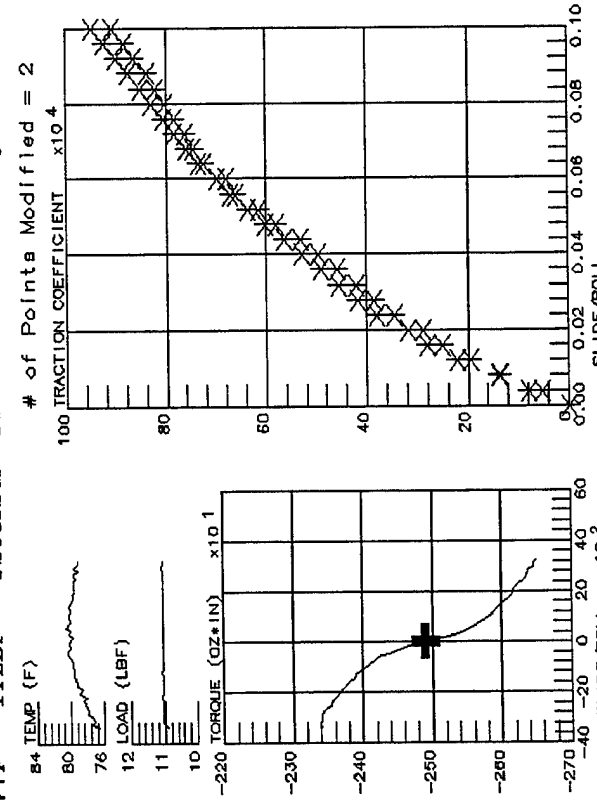
AJ 84-473 95% PAO + 5% Bardahl
77F 9LBF 1200RPM 17 FILE: 84-473aj #17

of Points Modified = 2

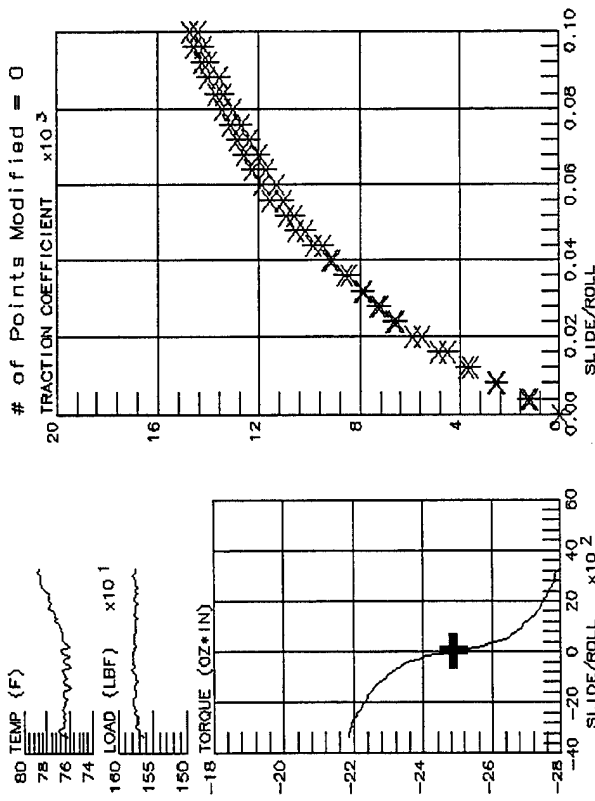


AJ 84-473 95% PAO + 5% Bardahl
77F 11LBF 1200RPM 19 FILE: 84-473aj #19

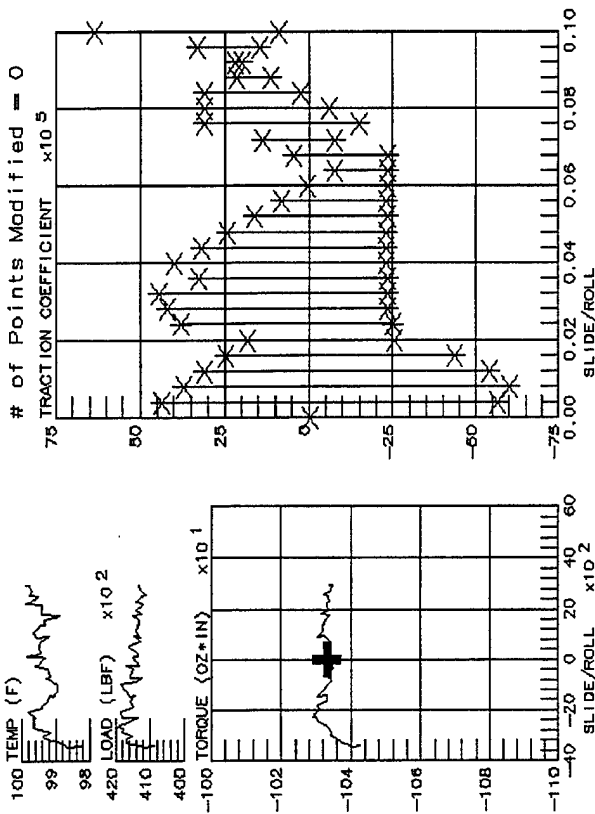
of Points Modified = 2



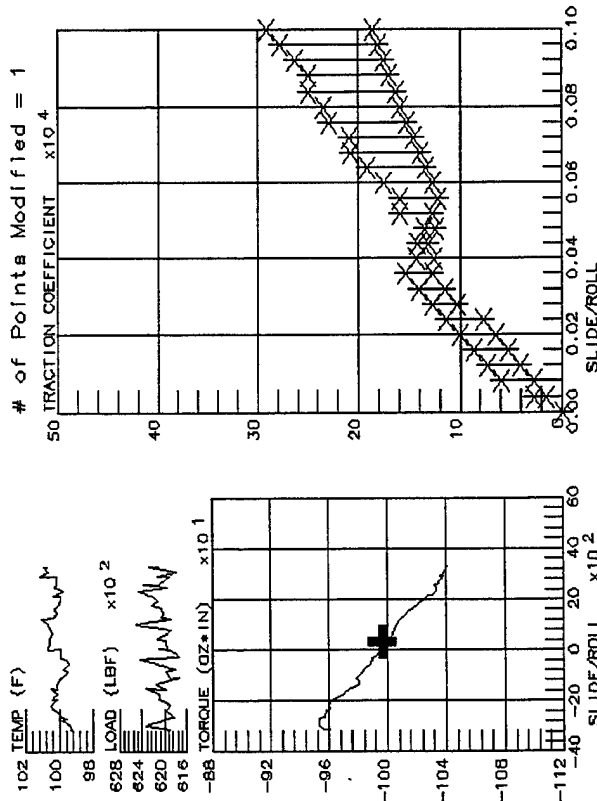
AJ 84-473 95% PAO + 5% Bardahl #21
100F 16LBF 1200RPM 21 FILE: 84-473aJ



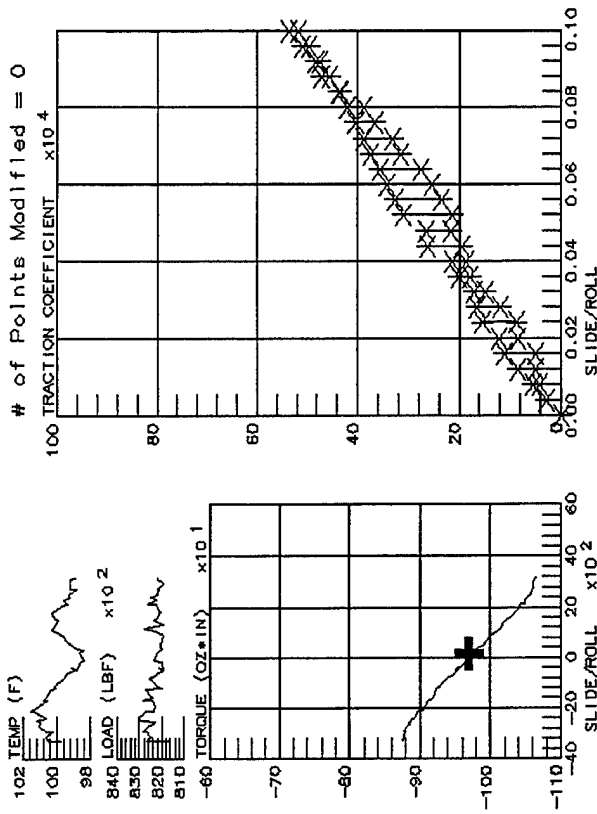
AJ 84-473 95% PAO + 5% Bardahl #22
100F 5LBF 300RPM 22 FILE: 84-473aJ



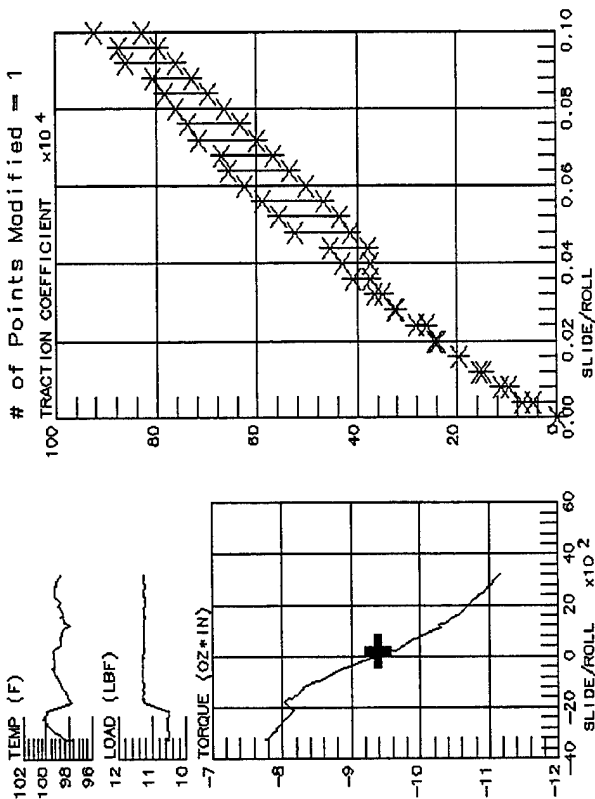
AJ 84-473 95% PAO + 5% Bardahl #23
100F 7LBF 300RPM 23 FILE: 84-473aJ



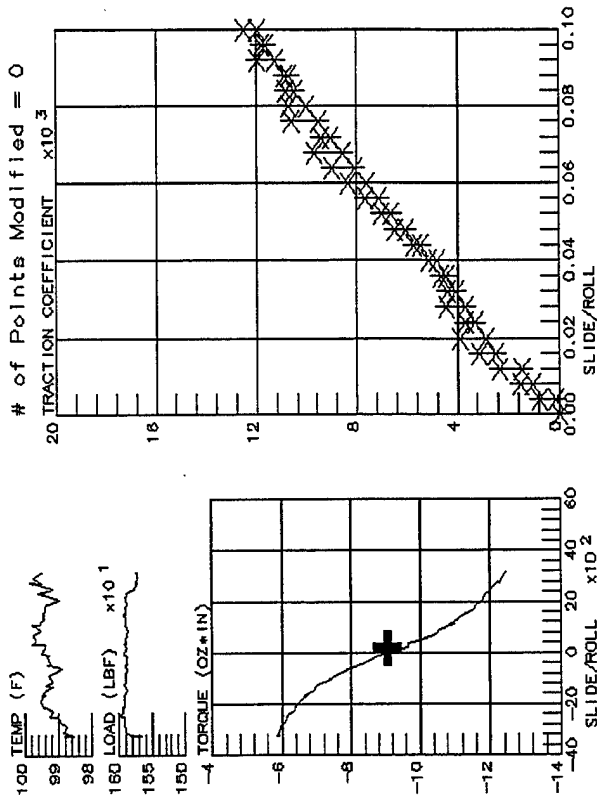
AJ 84-473 95% PAO + 5% Bardahl #24
100F 9LBF 300RPM 24 FILE: 84-473aJ



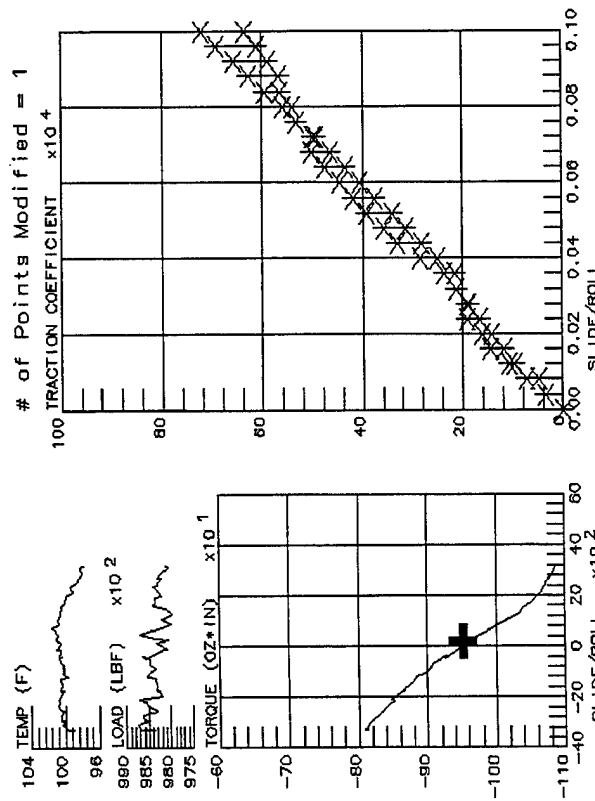
AJ 84-473 95% PAO + 5% Bardahl #26
100F 11LBF 300RPM 26 FILE: 84-473aj



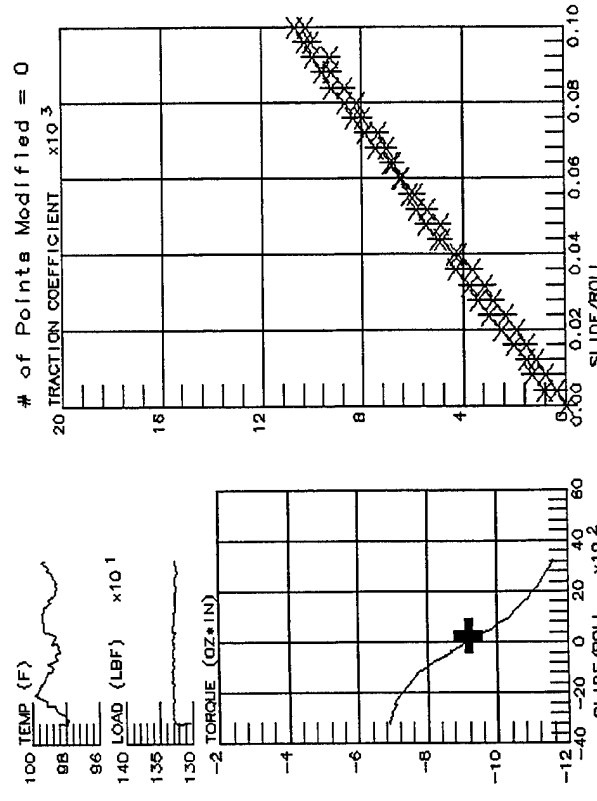
AJ 84-473 95% PAO + 5% Bardahl #28
100F 16LBF 300RPM 28 FILE: 84-473aj



AJ 84-473 95% PAO + 5% Bardahl #25
100F 11LBF 300RPM 25 FILE: 84-473aj

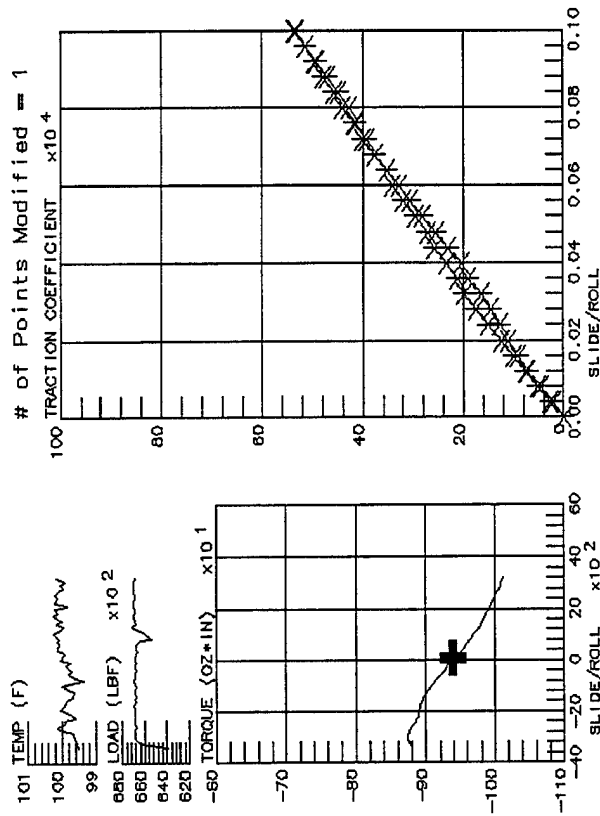
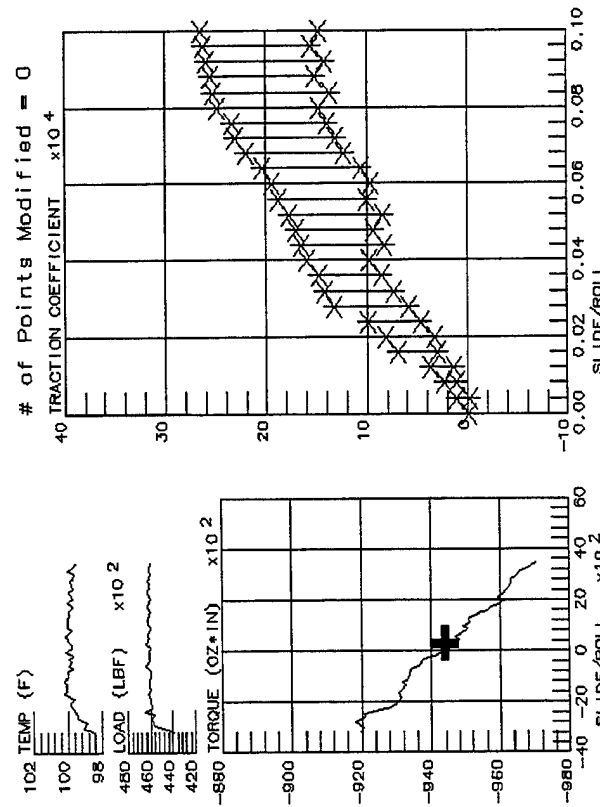


AJ 84-473 95% PAO + 5% Bardahl #27
100F 13LBF 300RPM 27 FILE: 84-473aj



AJ 84-473 95% PAO + 5% Bardahl
100F 5LBF 600RPM 29 FILE: 84-473aJ

#29
of Points Modified = 0

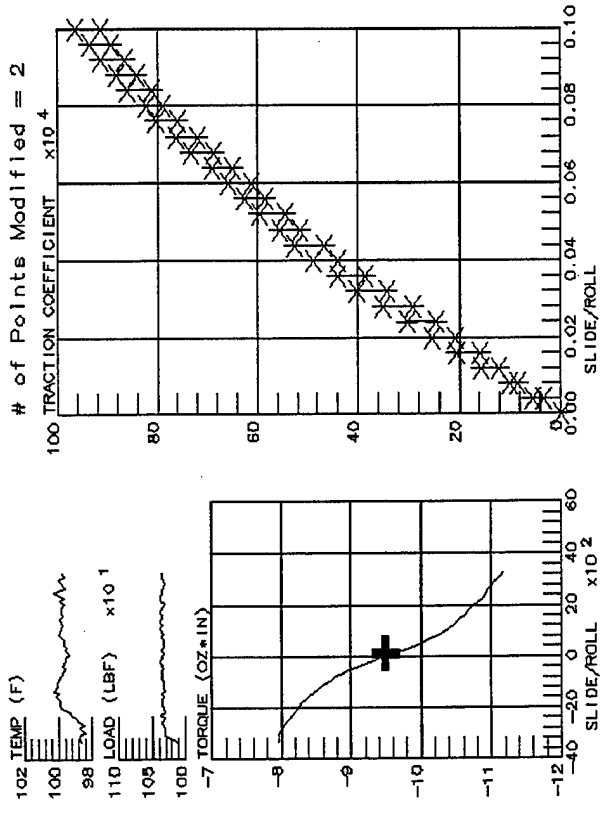
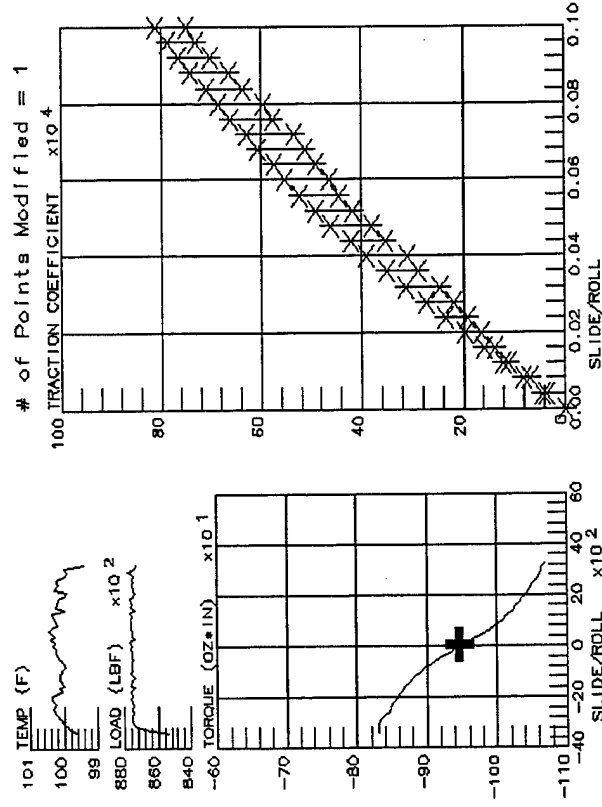


AJ 84-473 95% PAO + 5% Bardahl
100F 7LBF 600RPM 30 FILE: 84-473aJ

#30
of Points Modified = 1

AJ 84-473 95% PAO + 5% Bardahl
100F 9LBF 600RPM 31 FILE: 84-473aJ

#31
of Points Modified = 1

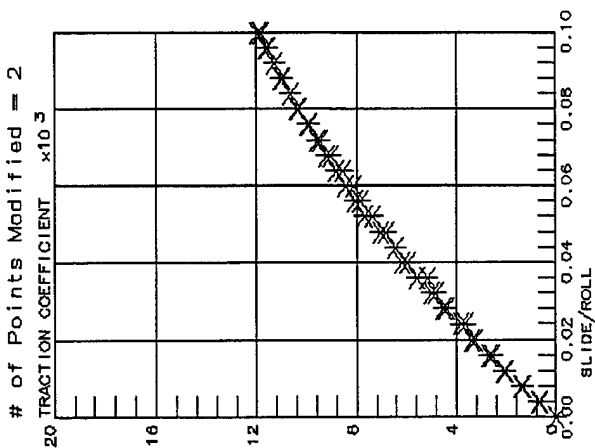
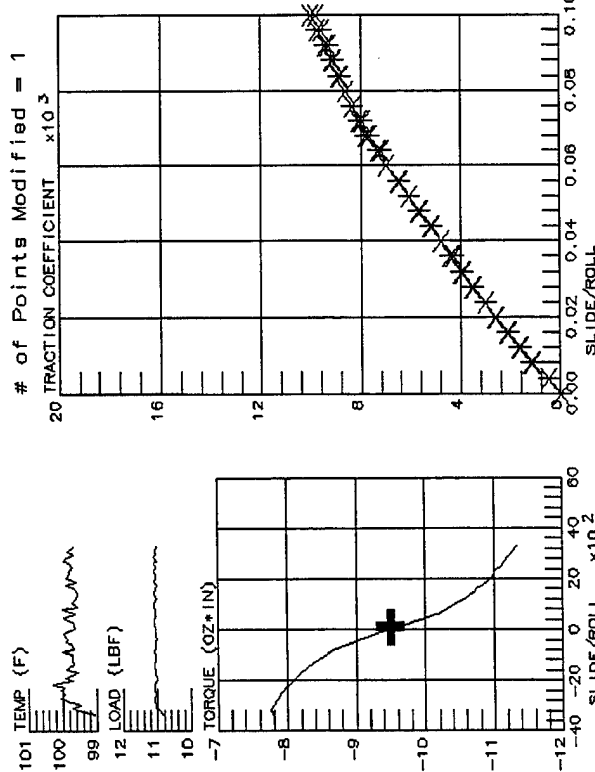


AJ 84-473 95% PAO + 5% Bardahl
100F 11LBF 600RPM 32 FILE: 84-473aJ

#32
of Points Modified = 2

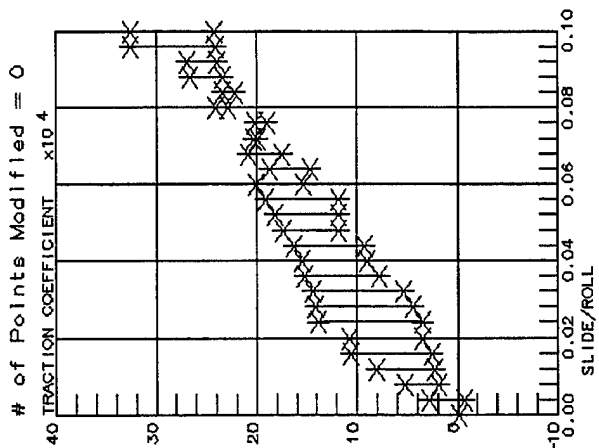
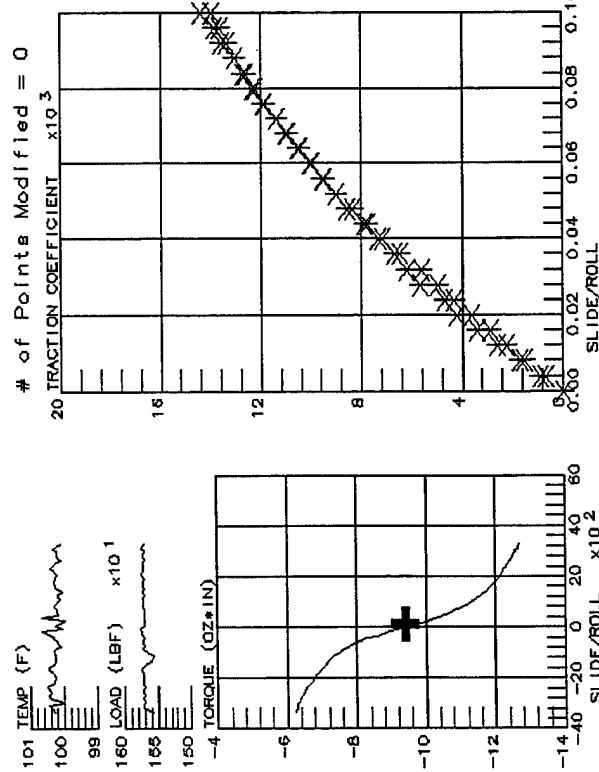
AJ 84-473 95% PAO + 5% Bardahl
100F 11LBF 600RPM 33 FILE: 84-473aJ

AJ 84-473 95% PAO + 5% Bardahl
100F 13LBF 600RPM 34 FILE: 84-473aJ



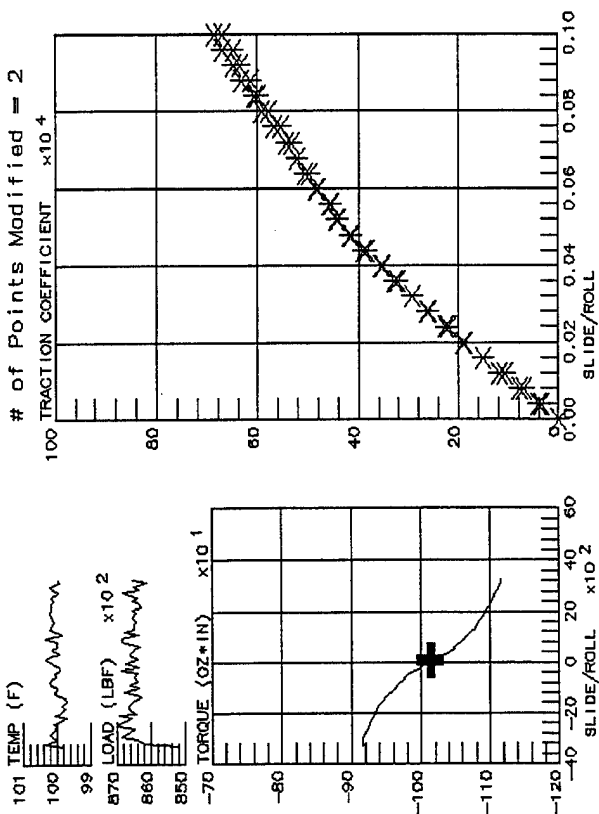
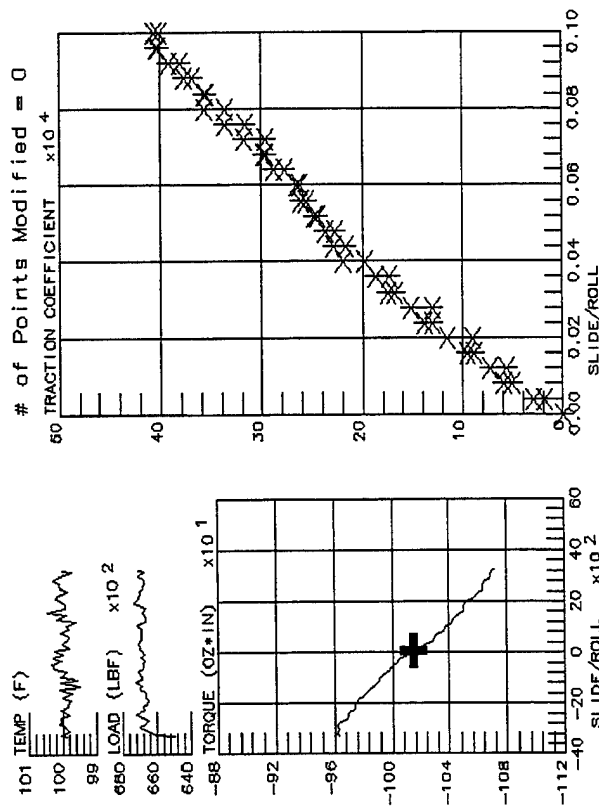
AJ 84-473 95% PAO + 5% Bardahl
100F 16LBF 600RPM 35 FILE: 84-473aJ

AJ 84-473 95% PAO + 5% Bardahl
100F 5LBF 1200RPM 36 FILE: 84-473aJ



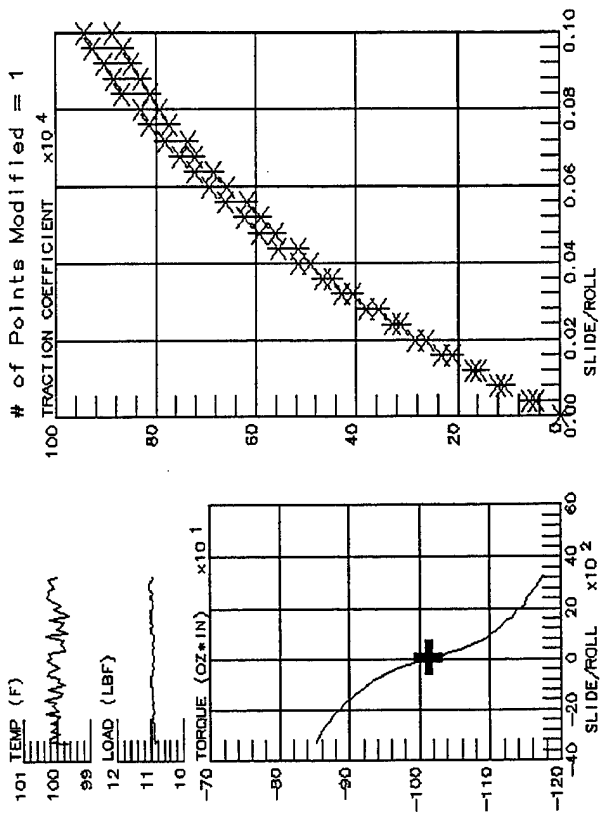
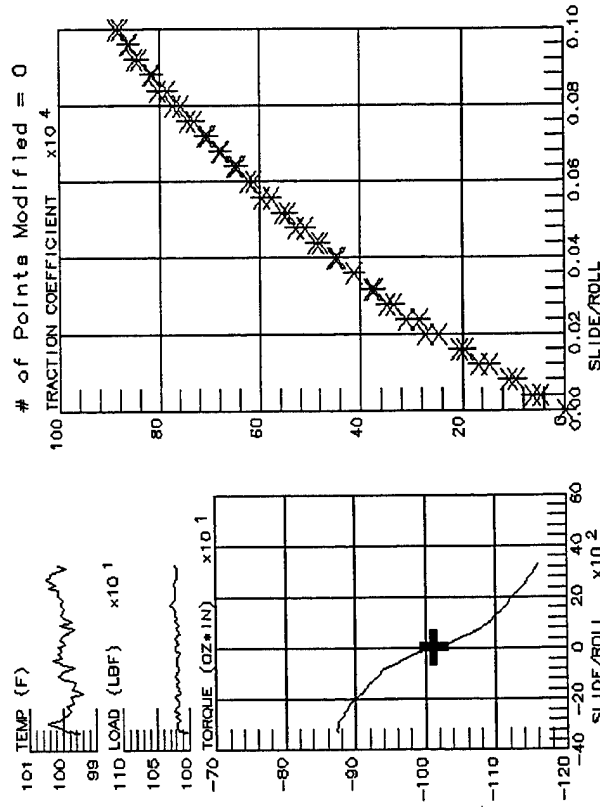
AJ 84-473 95% PAO + 5% Bardahl
100F 7LBF 1200RPM 37 FILE: 84-473aJ

AJ 84-473 95% PAO + 5% Bardahl
100F 9LBF 1200RPM 38 FILE: 84-473aJ



AJ 84-473 95% PAO + 5% Bardahl
100F 11LBF 1200RPM 39 FILE: 84-473aJ

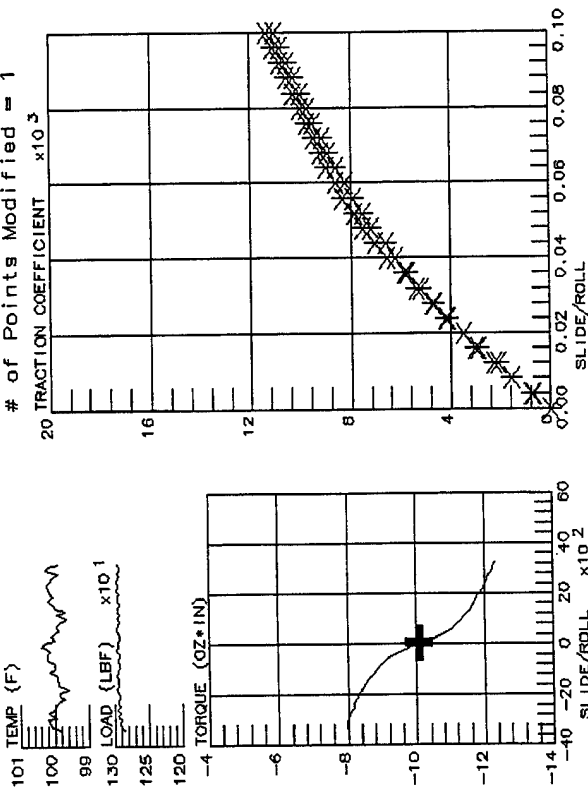
AJ 84-473 95% PAO + 5% Bardahl
100F 11LBF 1200RPM 40 FILE: 84-473aJ



TRACTION MODIFIERS

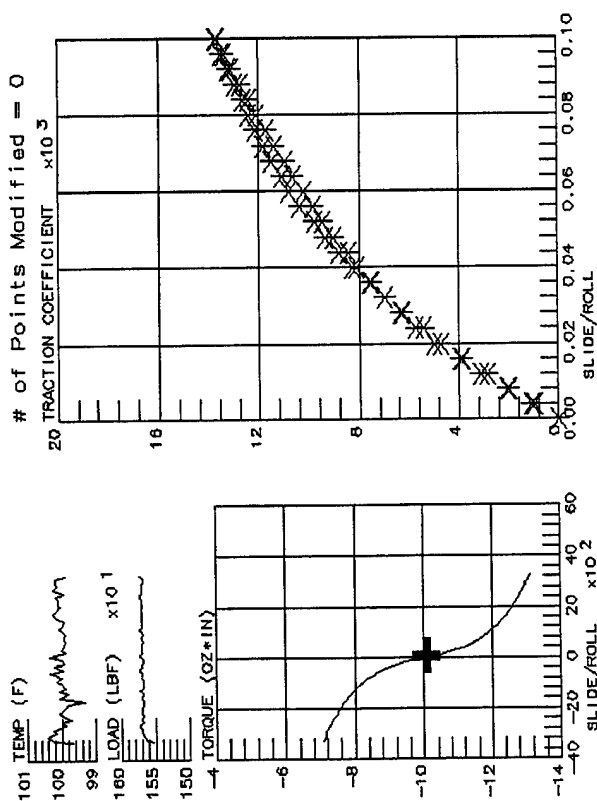
AJ 84-473 95% PAO + 5% Bardahl #41
100F 13LBF 1200RPM 41 FILE: 84-473aj

of Points Modified = 1



AJ 84-473 95% PAO + 5% Bardahl #42
100F 16LBF 1200RPM 42 FILE: 84-473aj

of Points Modified = 0



9. Traction Data Set H: 81-288 Apiezon C + 5% Bardhal (VacKote)

Data set name: BO 81-288 ApiezonC+5%Bardhal(VacKote)
Rolling radii [Disks 1 & 2] (in): 0.75 0.75
Crown radii [Disks 1 & 2] (in): 8.00 8.00

Number of data sets found = 274

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|----------|----------------|
| | | | | | | | Load1 Load2 Rpm1 Rpm2 Torq | | |
| 1 | 80.00 | 2.77 | 130.00 | 210.00 | 170.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.75E-04 | 81-288bo80 #1 |
| 2 | 80.00 | 5.61 | 130.00 | 210.00 | 170.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 2.14E-04 | 81-288bo80 #2 |
| 3 | 80.00 | 19.10 | 130.00 | 210.00 | 170.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.13E-03 | 81-288bo80 #3 |
| 4 | 80.00 | 65.25 | 130.00 | 210.00 | 170.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 2.66E-03 | 81-288bo80 #4 |
| 5 | 80.00 | 154.00 | 130.00 | 210.00 | 170.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 8.17E-04 | 81-288bo80 #5 |
| 6 | 80.00 | 2.77 | 178.00 | 368.00 | 273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 4.07E-04 | 81-288bo80 #6 |
| 7 | 80.00 | 5.61 | 178.00 | 368.00 | 273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 2.22E-05 | 81-288bo80 #7 |
| 8 | 80.00 | 19.10 | 178.00 | 368.00 | 273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 2.45E-04 | 81-288bo80 #8 |
| 9 | 80.00 | 65.25 | 178.00 | 368.00 | 273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 3.96E-03 | 81-288bo80 #9 |
| 10 | 80.00 | 154.00 | 178.00 | 368.00 | 273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 6.19E-03 | 81-288bo80 #10 |
| 11 | 80.00 | 2.77 | 1173.00 | 1373.00 | 1273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.17E-04 | 81-288bo80 #11 |
| 12 | 80.00 | 5.61 | 1173.00 | 1373.00 | 1273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.58E-04 | 81-288bo80 #12 |
| 13 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 8.56E-05 | 81-288bo80 #13 |
| 14 | 80.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 5.19E-04 | 81-288bo80 #14 |
| 15 | 80.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.31E-04 | 81-288bo80 #15 |
| 16 | 80.00 | 2.77 | 2446.00 | 2646.00 | 2546.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.08E-04 | 81-288bo80 #16 |
| 17 | 80.00 | 5.61 | 2446.00 | 2646.00 | 2546.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 3.31E-05 | 81-288bo80 #17 |
| 18 | 80.00 | 19.10 | 2446.00 | 2646.00 | 2546.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 7.16E-05 | 81-288bo80 #18 |
| 19 | 80.00 | 65.25 | 2446.00 | 2646.00 | 2546.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.05E-04 | 81-288bo80 #19 |
| 20 | 80.00 | 154.00 | 2446.00 | 2646.00 | 2546.00 | 40 | 0.71 1.49 1.00 1.00 1.00 | 1.99E-04 | 81-288bo80 #20 |
| 21 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 2.04E-04 | 81-288bo80 #1 |
| 22 | 80.00 | 19.10 | 5348.00 | 4838.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 2.60E-05 | 81-288bo80 #2 |
| 23 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 4.43E-04 | 81-288bo80 #1 |
| 24 | 80.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 4.78E-05 | 81-288bo80 #2 |
| 25 | 80.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 7.75E-04 | 81-288bo80 #3 |
| 26 | 80.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 2.29E-04 | 81-288bo80 #4 |
| 27 | 80.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 2.14E-04 | 81-288bo80 #5 |
| 28 | 80.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 5.38E-04 | 81-288bo80 #6 |
| 29 | 80.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 5.30E-05 | 81-288bo80 #7 |
| 30 | 80.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.00E-04 | 81-288bo80 #8 |
| 31 | 80.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 5.79E-04 | 81-288bo80 #9 |
| 32 | 80.00 | 19.10 | 302.00 | 334.00 | 318.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 6.97E-04 | 81-288bo80 #1 |
| 33 | 80.00 | 65.25 | 302.00 | 334.00 | 318.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.82E-01 | 81-288bo80 #2 |
| 34 | 80.00 | 154.00 | 302.00 | 334.00 | 318.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.99E-01 | 81-288bo80 #3 |
| 35 | 80.00 | 19.10 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.14E-03 | 81-288bo80 #4 |
| 36 | 80.00 | 65.25 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.23E-03 | 81-288bo80 #5 |
| 37 | 80.00 | 154.00 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.81E-02 | 81-288bo80 #6 |
| 38 | 80.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 4.61E-05 | 81-288bo80 #7 |
| 39 | 80.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 4.26E-04 | 81-288bo80 #8 |
| 40 | 80.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 8.89E-04 | 81-288bo80 #9 |
| 41 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 2.94E-05 | 81-288bo80 #10 |
| 42 | 80.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.24E-04 | 81-288bo80 #11 |
| 43 | 80.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 1.09E-03 | 81-288bo80 #12 |
| 44 | 80.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 4.48E-04 | 81-288bo80 #13 |
| 45 | 80.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 5.44E-04 | 81-288bo80 #14 |
| 46 | 80.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 7.38E-04 | 81-288bo80 #15 |
| 47 | 80.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 6.37E-04 | 81-288bo80 #16 |
| 48 | 80.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 9.95E-05 | 81-288bo80 #17 |
| 49 | 80.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 1.49 1.00 1.00 1.00 | 9.56E-04 | 81-288bo80 #18 |
| 50 | 80.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 1.49 1.00 1.00 1.00 | 2.84E-03 | 81-288bo80 #1 |

Data set: BO 81-288 ApiezonC+5%Bardhal(Vackote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|----------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|-----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.38E-04 | 81-288bo80 #2 |
| 52 | 80.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.79E-05 | 81-288bo80 #3 |
| 53 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.88E-04 | 81-288bo80 #4 |
| 54 | 80.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.33E-05 | 81-288bo80 #5 |
| 55 | 80.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.00E-04 | 81-288bo80 #6 |
| 56 | 80.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.20E-04 | 81-288bo80 #1 |
| 57 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.03E-04 | 81-288bo80 #2 |
| 58 | 80.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.45E-04 | 81-288bo80 #3 |
| 59 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.55E-06 | 81-288bo80 #4 |
| 60 | 80.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.03E-03 | 81-288bo80 #1 |
| 61 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-04 | 81-288bo80 #2 |
| 62 | 80.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.93E-05 | 81-288bo80 #3 |
| 63 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.77E-06 | 81-288bo80 #4 |
| 64 | 80.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.06E-05 | 81-288bo80 #5 |
| 65 | 80.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-04 | 81-288bo80 #6 |
| 66 | 80.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.24E-04 | 81-288bo80 #1 |
| 67 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.39E-04 | 81-288bo80 #2 |
| 68 | 80.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.58E-04 | 81-288bo80 #4 |
| 69 | 80.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.39E-04 | 81-288bo80 #5 |
| 70 | 80.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.63E-03 | 81-288bo80 #6 |
| 71 | 80.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.01E-04 | 81-288bo80 #1 |
| 72 | 80.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.34E-04 | 81-288bo80 #2 |
| 73 | 80.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-05 | 81-288bo80 #3 |
| 74 | 80.00 | 19.10 | 418.00 | 218.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.42E-04 | 81-288bo80 #1 |
| 75 | 80.00 | 65.25 | 418.00 | 218.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.44E-03 | 81-288bo80 #2 |
| 76 | 80.00 | 154.00 | 418.00 | 218.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.14E-02 | 81-288bo80 #3 |
| 77 | 80.00 | 19.10 | 1373.00 | 1173.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.87E-04 | 81-288bo80 #4 |
| 78 | 80.00 | 65.25 | 1373.00 | 1173.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.65E-04 | 81-288bo80 #5 |
| 79 | 80.00 | 154.00 | 1373.00 | 1173.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-01 | 81-288bo80 #6 |
| 80 | 80.00 | 19.10 | 2673.00 | 2419.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.00E-05 | 81-288bo80 #7 |
| 81 | 80.00 | 65.25 | 2673.00 | 2419.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.86E-04 | 81-288bo80 #8 |
| 82 | 80.00 | 154.00 | 2673.00 | 2419.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.43E-02 | 81-288bo80 #9 |
| 83 | 80.00 | 154.00 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-02 | 81-288bo80 #1 |
| 84 | 80.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.40E-04 | 81-288bo80 #2 |
| 85 | 80.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.62E-04 | 81-288bo80 #3 |
| 86 | 80.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.45E-04 | 81-288bo80 #4 |
| 87 | 80.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-04 | 81-288bo80 #5 |
| 88 | 80.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.61E-05 | 81-288bo80 #6 |
| 89 | 80.00 | 19.10 | 418.00 | 218.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.35E-04 | 81-288bo80 #1 |
| 90 | 80.00 | 65.25 | 418.00 | 218.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-03 | 81-288bo80 #2 |
| 91 | 80.00 | 19.10 | 1373.00 | 1173.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-04 | 81-288bo80 #3 |
| 92 | 80.00 | 65.25 | 1373.00 | 1173.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.50E-04 | 81-288bo80 #4 |
| 93 | 80.00 | 19.10 | 2673.00 | 2419.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.49E-05 | 81-288bo80 #5 |
| 94 | 80.00 | 65.25 | 2673.00 | 2419.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.15E-04 | 81-288bo80 #6 |
| 95 | 80.00 | 19.10 | 5348.00 | 4838.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.57E-04 | 81-288bo80 #7 |
| 96 | 80.00 | 65.25 | 5348.00 | 4838.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-04 | 81-288bo80 #8 |
| 97 | 80.00 | 19.10 | 8021.00 | 7257.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.66E-05 | 81-288bo80 #9 |
| 98 | 80.00 | 65.25 | 8021.00 | 7257.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.04E-05 | 81-288bo80 #10 |
| 99 | 80.00 | 19.10 | 10695.00 | 9677.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.57E-05 | 81-288bo80 #11 |
| 100 | 80.00 | 65.25 | 10695.00 | 9677.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-04 | 81-288bo80 #12 |
| 101 | 100.00 | 19.10 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-02 | 81-288bo100 #1 |
| 102 | 100.00 | 65.25 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.97E-02 | 81-288bo100 #2 |
| 103 | 100.00 | 154.00 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.75E-04 | 81-288bo100 #3 |
| 104 | 100.00 | 19.10 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.57E-04 | 81-288bo100 #4 |
| 105 | 100.00 | 65.25 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.32E-03 | 81-288bo100 #5 |
| 106 | 100.00 | 154.00 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.43E-04 | 81-288bo100 #6 |
| 107 | 100.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-04 | 81-288bo100 #7 |
| 108 | 100.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.65E-04 | 81-288bo100 #8 |
| 109 | 100.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.17E-03 | 81-288bo100 #9 |
| 110 | 100.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | 81-288bo100 #10 |
| 111 | 100.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-04 | 81-288bo100 #11 |
| 112 | 100.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.37E-04 | 81-288bo100 #12 |
| 113 | 100.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-03 | 81-288bo100 #13 |
| 114 | 100.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.57E-04 | 81-288bo100 #14 |
| 115 | 100.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.79E-04 | 81-288bo100 #15 |
| 116 | 100.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.81E-03 | 81-288bo100 #16 |
| 117 | 100.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.05E-05 | 81-288bo100 #17 |
| 118 | 100.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.13E-04 | 81-288bo100 #18 |
| 119 | 100.00 | 19.10 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.59E-03 | 81-288bo100 #1 |
| 120 | 100.00 | 65.25 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.70E-03 | 81-288bo100 #2 |

Data set: BO 81-288 ApiezonC+5%Bardhal(VacKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|----------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|-----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 100.00 | 154.00 | 302.00 | 334.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-03 | 81-288bo100 #3 |
| 122 | 100.00 | 19.10 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.04E-04 | 81-288bo100 #4 |
| 123 | 100.00 | 65.25 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.10E-04 | 81-288bo100 #5 |
| 124 | 100.00 | 154.00 | 1209.00 | 1337.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.70E-04 | 81-288bo100 #6 |
| 125 | 100.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.95E-04 | 81-288bo100 #7 |
| 126 | 100.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.52E-04 | 81-288bo100 #8 |
| 127 | 100.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.55E-04 | 81-288bo100 #9 |
| 128 | 100.00 | 19.10 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-04 | 81-288bo100 #1 |
| 129 | 100.00 | 65.25 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.65E-03 | 81-288bo100 #2 |
| 130 | 100.00 | 154.00 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.13E-02 | 81-288bo100 #3 |
| 131 | 100.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.09E-04 | 81-288bo100 #4 |
| 132 | 100.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-03 | 81-288bo100 #5 |
| 133 | 100.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.76E-04 | 81-288bo100 #6 |
| 134 | 100.00 | 19.10 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-04 | 81-288bo100 #7 |
| 135 | 100.00 | 65.25 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.49E-04 | 81-288bo100 #8 |
| 136 | 100.00 | 154.00 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.52E-04 | 81-288bo100 #9 |
| 137 | 100.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.28E-04 | 81-288bo100 #1 |
| 138 | 100.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.81E-04 | 81-288bo100 #2 |
| 139 | 100.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.02E-04 | 81-288bo100 #3 |
| 140 | 100.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.98E-05 | 81-288bo100 #4 |
| 141 | 100.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | 81-288bo100 #5 |
| 142 | 100.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.56E-04 | 81-288bo100 #6 |
| 143 | 100.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-03 | 81-288bo100 #7 |
| 144 | 100.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.44E-05 | 81-288bo100 #8 |
| 145 | 100.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.72E-04 | 81-288bo100 #9 |
| 146 | 100.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.06E-03 | 81-288bo100 #1 |
| 147 | 100.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-04 | 81-288bo100 #2 |
| 148 | 100.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.03E-05 | 81-288bo100 #3 |
| 149 | 100.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.04E-04 | 81-288bo100 #4 |
| 150 | 100.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-05 | 81-288bo100 #5 |
| 151 | 100.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-04 | 81-288bo100 #6 |
| 152 | 100.00 | 2.77 | 130.00 | 210.00 | 170.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.04E-04 | 81-288bo100 #1 |
| 153 | 100.00 | 19.10 | 130.00 | 210.00 | 170.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.52E-04 | 81-288bo100 #2 |
| 154 | 100.00 | 65.25 | 130.00 | 210.00 | 170.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.66E-03 | 81-288bo100 #3 |
| 155 | 100.00 | 154.00 | 130.00 | 210.00 | 170.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.36E-04 | 81-288bo100 #4 |
| 156 | 100.00 | 2.77 | 178.00 | 368.00 | 273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.18E-04 | 81-288bo100 #5 |
| 157 | 100.00 | 19.10 | 178.00 | 368.00 | 273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-03 | 81-288bo100 #6 |
| 158 | 100.00 | 65.25 | 178.00 | 368.00 | 273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-04 | 81-288bo100 #7 |
| 159 | 100.00 | 154.00 | 178.00 | 368.00 | 273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.13E-03 | 81-288bo100 #8 |
| 160 | 100.00 | 2.77 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.09E-04 | 81-288bo100 #9 |
| 161 | 100.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.50E-05 | 81-288bo100 #10 |
| 162 | 100.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.28E-04 | 81-288bo100 #11 |
| 163 | 100.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.57E-04 | 81-288bo100 #12 |
| 164 | 100.00 | 2.77 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 0.00E+00 | 81-288bo100 #13 |
| 165 | 100.00 | 19.10 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.26E-05 | 81-288bo100 #14 |
| 166 | 100.00 | 65.25 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.39E-04 | 81-288bo100 #15 |
| 167 | 100.00 | 154.00 | 2446.00 | 2646.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.57E-05 | 81-288bo100 #16 |
| 168 | 100.00 | 2.77 | 130.00 | 210.00 | 170.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.04E-05 | 81-288bo100 #1 |
| 169 | 100.00 | 5.61 | 130.00 | 210.00 | 170.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.85E-04 | 81-288bo100 #2 |
| 170 | 100.00 | 2.77 | 178.00 | 368.00 | 273.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.21E-04 | 81-288bo100 #3 |
| 171 | 100.00 | 5.61 | 178.00 | 368.00 | 273.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-05 | 81-288bo100 #4 |
| 172 | 100.00 | 2.77 | 1173.00 | 1373.00 | 1273.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.85E-04 | 81-288bo100 #5 |
| 173 | 100.00 | 5.61 | 1173.00 | 1373.00 | 1273.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.00E-04 | 81-288bo100 #6 |
| 174 | 100.00 | 2.77 | 2446.00 | 2646.00 | 2546.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.82E-04 | 81-288bo100 #7 |
| 175 | 100.00 | 5.61 | 2446.00 | 2646.00 | 2546.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.71E-04 | 81-288bo100 #8 |
| 176 | 100.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-05 | 81-288bo100 #1 |
| 177 | 100.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.58E-04 | 81-288bo100 #2 |
| 178 | 100.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.72E-04 | 81-288bo100 #3 |
| 179 | 100.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.82E-05 | 81-288bo100 #4 |
| 180 | 100.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.79E-05 | 81-288bo100 #5 |
| 181 | 100.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.92E-04 | 81-288bo100 #6 |
| 182 | 100.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.53E-03 | 81-288bo100 #7 |
| 183 | 100.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.01E-05 | 81-288bo100 #8 |
| 184 | 100.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-04 | 81-288bo100 #9 |
| 185 | 100.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-03 | 81-288bo100 #1 |
| 186 | 100.00 | 19.10 | 10695.00 | 9677.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-03 | 81-288bo100 #2 |
| 187 | 150.00 | 19.10 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.43E-03 | 81-288bo150 #1 |
| 188 | 150.00 | 65.25 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.39E-03 | 81-288bo150 #2 |
| 189 | 150.00 | 154.00 | 218.00 | 418.00 | 318.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.05E-06 | 81-288bo150 #3 |
| 190 | 150.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-05 | 81-288bo150 #4 |

Data set: BO 81-288 ApiezonC+5%Bardhal(VacKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|-----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 191 | 150.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.94E-04 | 81-288bo150 #5 |
| 192 | 150.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.05E-02 | 81-288bo150 #6 |
| 193 | 150.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.18E-05 | 81-288bo150 #7 |
| 194 | 150.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.63E-04 | 81-288bo150 #8 |
| 195 | 150.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.88E-03 | 81-288bo150 #9 |
| 196 | 150.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.63E-05 | 81-288bo150 #10 |
| 197 | 150.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.44E-05 | 81-288bo150 #11 |
| 198 | 150.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.93E-04 | 81-288bo150 #12 |
| 199 | 150.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.13E-05 | 81-288bo150 #13 |
| 200 | 150.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.73E-04 | 81-288bo150 #14 |
| 201 | 150.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.88E-04 | 81-288bo150 #15 |
| 202 | 150.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.38E-05 | 81-288bo150 #16 |
| 203 | 150.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-04 | 81-288bo150 #17 |
| 204 | 150.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.43E-04 | 81-288bo150 #18 |
| 205 | 150.00 | 65.25 | 168.00 | 468.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.23E-04 | 81-288bo150 #1 |
| 206 | 150.00 | 154.00 | 168.00 | 468.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-02 | 81-288bo150 #2 |
| 207 | 150.00 | 65.25 | 1073.00 | 1473.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.10E-05 | 81-288bo150 #3 |
| 208 | 150.00 | 154.00 | 1073.00 | 1473.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.04E-04 | 81-288bo150 #4 |
| 209 | 150.00 | 65.25 | 2346.00 | 2746.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.09E-04 | 81-288bo150 #5 |
| 210 | 150.00 | 154.00 | 2346.00 | 2746.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.40E-04 | 81-288bo150 #6 |
| 211 | 200.00 | 19.10 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.82E-03 | 81-288bo200 #1 |
| 212 | 200.00 | 65.25 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.33E-03 | 81-288bo200 #2 |
| 213 | 200.00 | 154.00 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.65E-02 | 81-288bo200 #3 |
| 214 | 200.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.27E-05 | 81-288bo200 #4 |
| 215 | 200.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.23E-03 | 81-288bo200 #5 |
| 216 | 200.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.91E-05 | 81-288bo200 #6 |
| 217 | 200.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.74E-05 | 81-288bo200 #7 |
| 218 | 200.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-04 | 81-288bo200 #8 |
| 219 | 200.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.57E-04 | 81-288bo200 #9 |
| 220 | 200.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-05 | 81-288bo200 #10 |
| 221 | 200.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.48E-05 | 81-288bo200 #11 |
| 222 | 200.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.82E-04 | 81-288bo200 #12 |
| 223 | 200.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.62E-06 | 81-288bo200 #13 |
| 224 | 200.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.13E-05 | 81-288bo200 #14 |
| 225 | 200.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.73E-04 | 81-288bo200 #15 |
| 226 | 200.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-05 | 81-288bo200 #16 |
| 227 | 200.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.59E-05 | 81-288bo200 #17 |
| 228 | 200.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.52E-04 | 81-288bo200 #18 |
| 229 | 250.00 | 19.10 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-01 | 81-288bo250 #1 |
| 230 | 250.00 | 65.25 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.62E-02 | 81-288bo250 #2 |
| 231 | 250.00 | 154.00 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.70E-02 | 81-288bo250 #3 |
| 232 | 250.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.37E-05 | 81-288bo250 #4 |
| 233 | 250.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.63E-04 | 81-288bo250 #5 |
| 234 | 250.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.08E-04 | 81-288bo250 #6 |
| 235 | 250.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.46E-05 | 81-288bo250 #12 |
| 236 | 250.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.05E-06 | 81-288bo250 #14 |
| 237 | 250.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.71E-05 | 81-288bo250 #16 |
| 238 | 250.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.84E-04 | 81-288bo250 #18 |
| 239 | 250.00 | 19.10 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.75E-02 | 81-288bo250 #1 |
| 240 | 250.00 | 65.25 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.54E-02 | 81-288bo250 #2 |
| 241 | 250.00 | 154.00 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.91E-02 | 81-288bo250 #3 |
| 242 | 250.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.56E-05 | 81-288bo250 #4 |
| 243 | 250.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.37E-04 | 81-288bo250 #5 |
| 244 | 250.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.61E-04 | 81-288bo250 #6 |
| 245 | 250.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.49E-05 | 81-288bo250 #7 |
| 246 | 250.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-05 | 81-288bo250 #8 |
| 247 | 250.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.23E-05 | 81-288bo250 #9 |
| 248 | 250.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.52E-06 | 81-288bo250 #10 |
| 249 | 250.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.34E-05 | 81-288bo250 #11 |
| 250 | 250.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.42E-05 | 81-288bo250 #12 |
| 251 | 250.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-05 | 81-288bo250 #13 |
| 252 | 250.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.29E-04 | 81-288bo250 #14 |
| 253 | 250.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.07E-04 | 81-288bo250 #15 |
| 254 | 250.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.94E-06 | 81-288bo250 #16 |
| 255 | 250.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.48E-04 | 81-288bo250 #17 |
| 256 | 250.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.87E-04 | 81-288bo250 #18 |
| 257 | 300.00 | 19.10 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.43E-01 | 81-288bo300 #1 |
| 258 | 300.00 | 65.25 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-01 | 81-288bo300 #2 |
| 259 | 300.00 | 154.00 | 218.00 | 418.00 | 318.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-02 | 81-288bo300 #3 |
| 260 | 300.00 | 19.10 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | 81-288bo300 #4 |

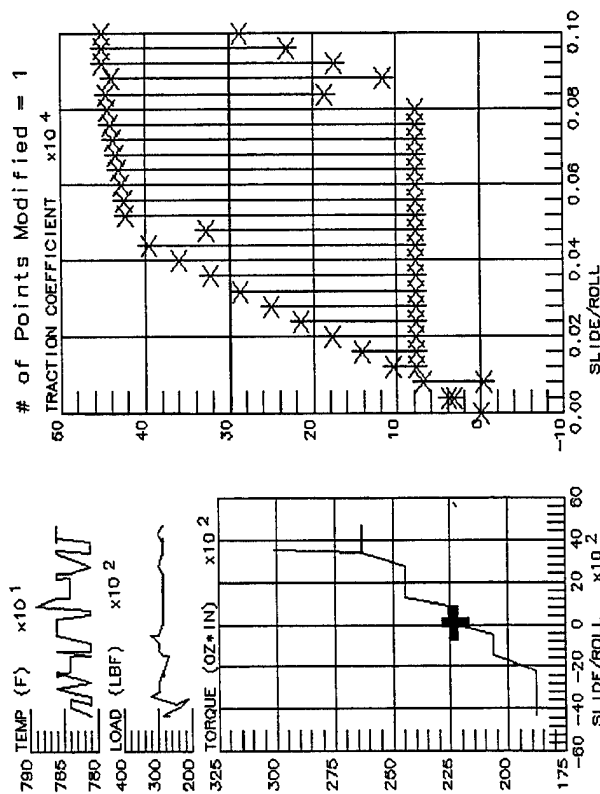
Data set: 80 81-288 ApiezonC+5%Bardhal(VacKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|-----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 261 | 300.00 | 65.25 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.36E-04 | 81-288bo300 #5 |
| 262 | 300.00 | 154.00 | 1173.00 | 1373.00 | 1273.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.44E-04 | 81-288bo300 #6 |
| 263 | 300.00 | 19.10 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-05 | 81-288bo300 #7 |
| 264 | 300.00 | 65.25 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.05E-05 | 81-288bo300 #8 |
| 265 | 300.00 | 154.00 | 2419.00 | 2673.00 | 2546.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.60E-05 | 81-288bo300 #9 |
| 266 | 300.00 | 19.10 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-05 | 81-288bo300 #10 |
| 267 | 300.00 | 65.25 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.02E-06 | 81-288bo300 #11 |
| 268 | 300.00 | 154.00 | 4838.00 | 5348.00 | 5093.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.38E-05 | 81-288bo300 #12 |
| 269 | 300.00 | 19.10 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.63E-05 | 81-288bo300 #13 |
| 270 | 300.00 | 65.25 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.68E-06 | 81-288bo300 #14 |
| 271 | 300.00 | 154.00 | 7257.00 | 8021.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.40E-04 | 81-288bo300 #15 |
| 272 | 300.00 | 19.10 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.96E-05 | 81-288bo300 #16 |
| 273 | 300.00 | 65.25 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.41E-06 | 81-288bo300 #17 |
| 274 | 300.00 | 154.00 | 9677.00 | 10695.00 | 10186.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.22E-04 | 81-288bo300 #18 |

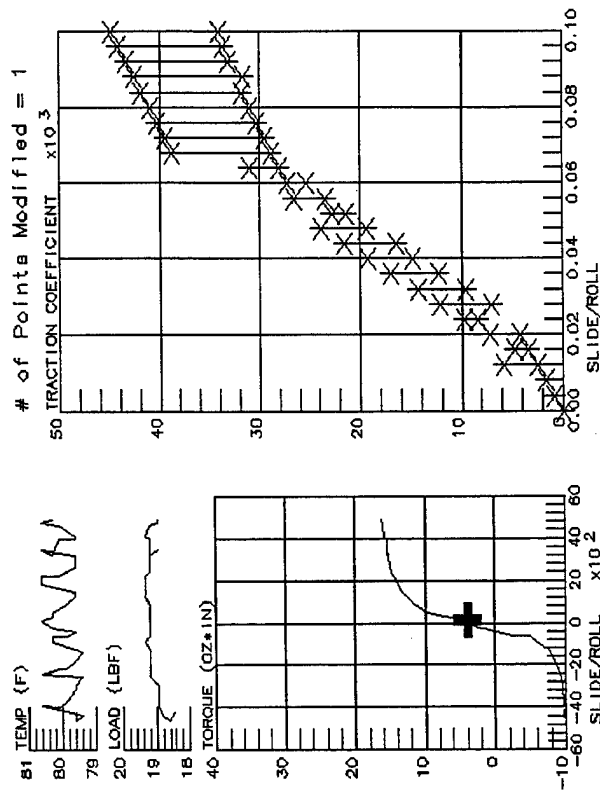
Summary of Select Data Files

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| bo2.dat | 80.00 | 5093.00 | 59 24 86 |
| bo3.dat | 80.00 | 7639.00 | 54 98 87 |
| bo4.dat | 80.00 | 10186.00 | 29 48 88 |
| bo5.dat | 100.00 | 2546.00 | 148 166 167 |
| bo6.dat | 100.00 | 5093.00 | 176 111 139 |
| bo7.dat | 100.00 | 7639.00 | 179 180 142 |
| bo8.dat | 100.00 | 10186.00 | 151 183 184 |
| bo9.dat | 150.00 | 2546.00 | 193 209 210 |
| bo10.dat | 150.00 | 5093.00 | 196 197 198 |
| bo11.dat | 150.00 | 7639.00 | 199 200 201 |
| bo12.dat | 150.00 | 10186.00 | 202 203 204 |
| bo13.dat | 200.00 | 2546.00 | 217 218 219 |
| bo14.dat | 200.00 | 5093.00 | 220 221 222 |
| bo15.dat | 200.00 | 7639.00 | 223 224 225 |
| bo16.dat | 200.00 | 10186.00 | 226 227 228 |
| bo17.dat | 250.00 | 2546.00 | 245 246 247 |
| bo18.dat | 250.00 | 5093.00 | 248 249 235 |
| bo19.dat | 250.00 | 7639.00 | 251 236 253 |
| bo20.dat | 250.00 | 10186.00 | 254 255 238 |
| bo21.dat | 300.00 | 2546.00 | 263 264 265 |
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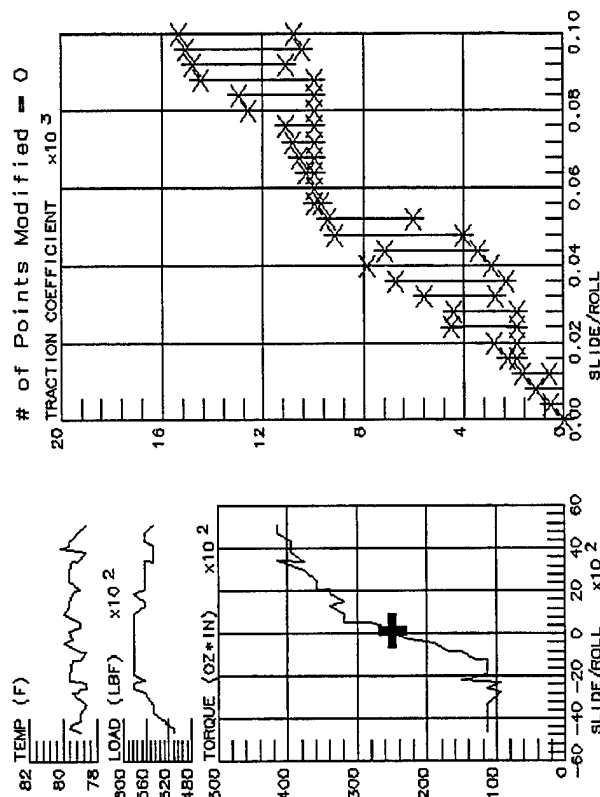
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80F 3LBF 170RPM 1 FILE: 81-288bo80



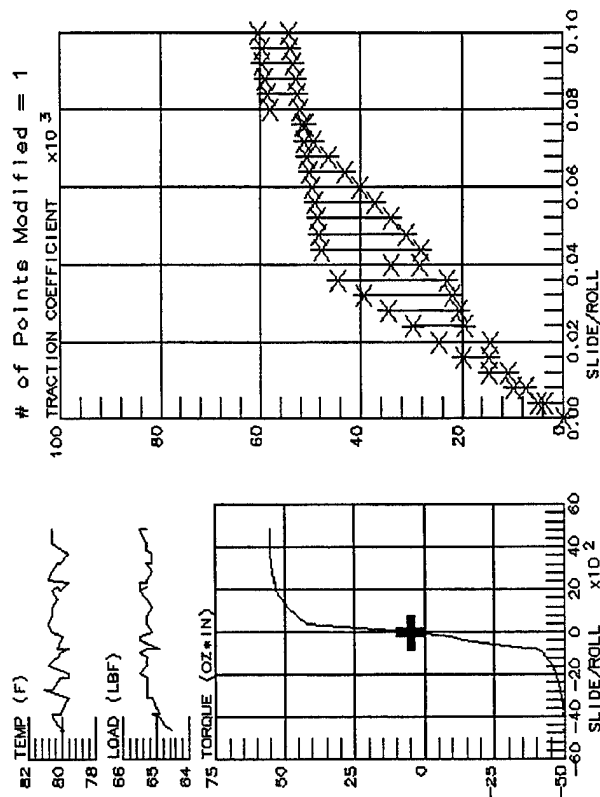
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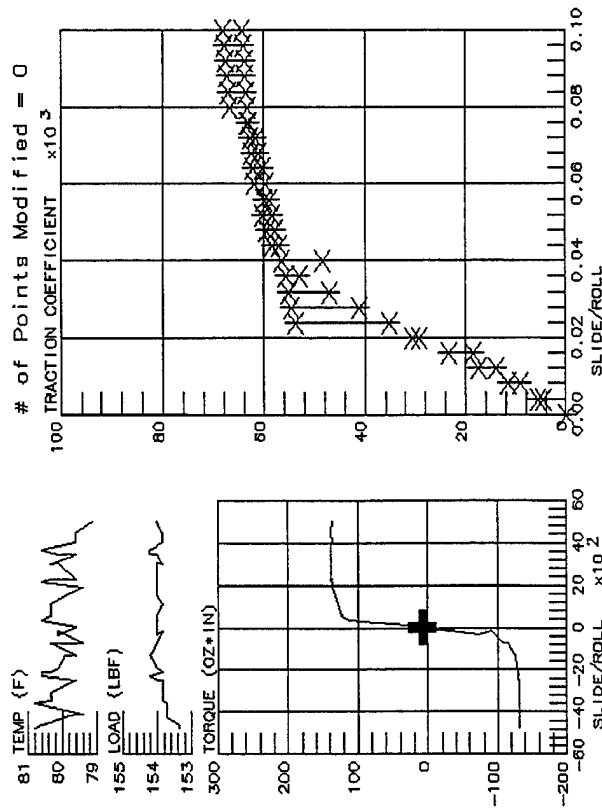
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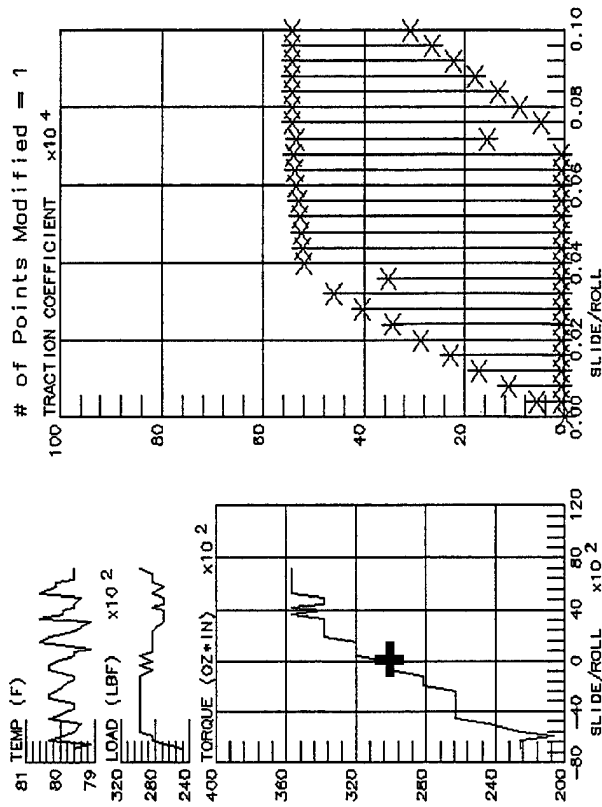
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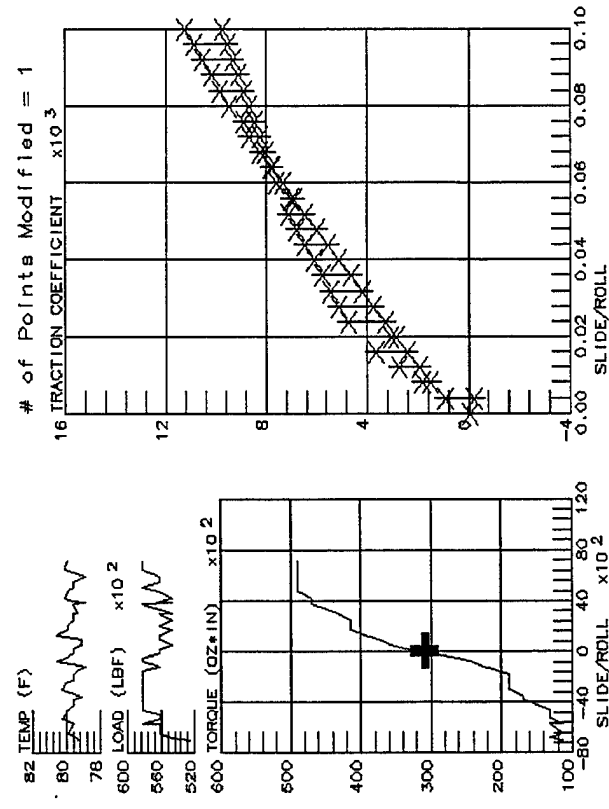
BO 81-288 ApiezonC+5%Bardhal (VacKote) #5
80F 154LBF 170RPM 5 FILE: 81-288b080



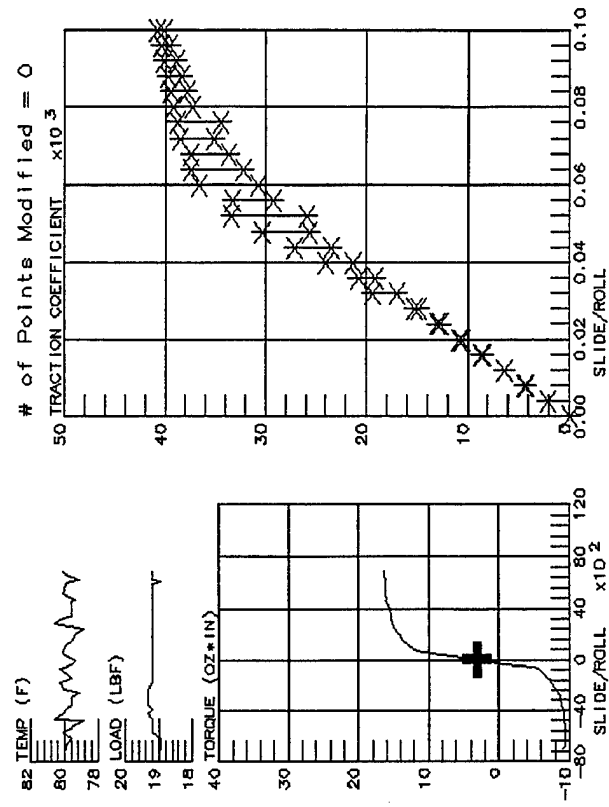
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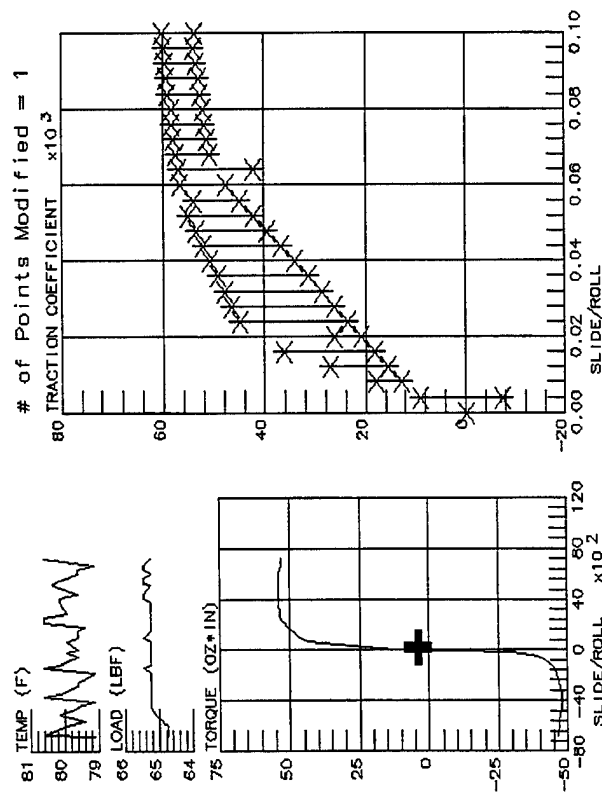
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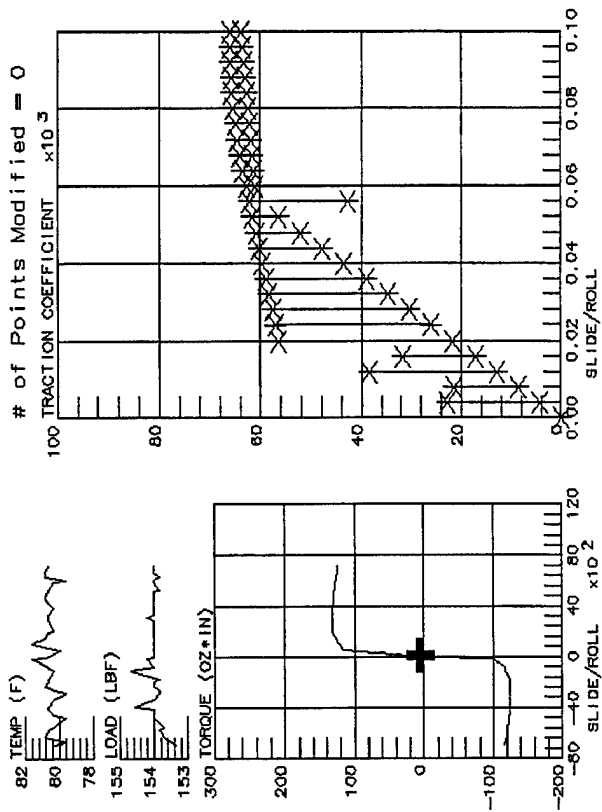
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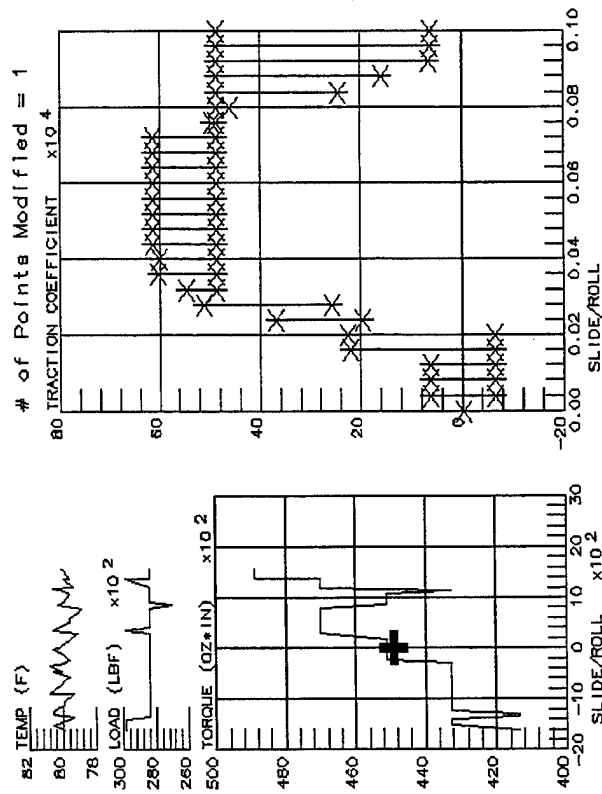
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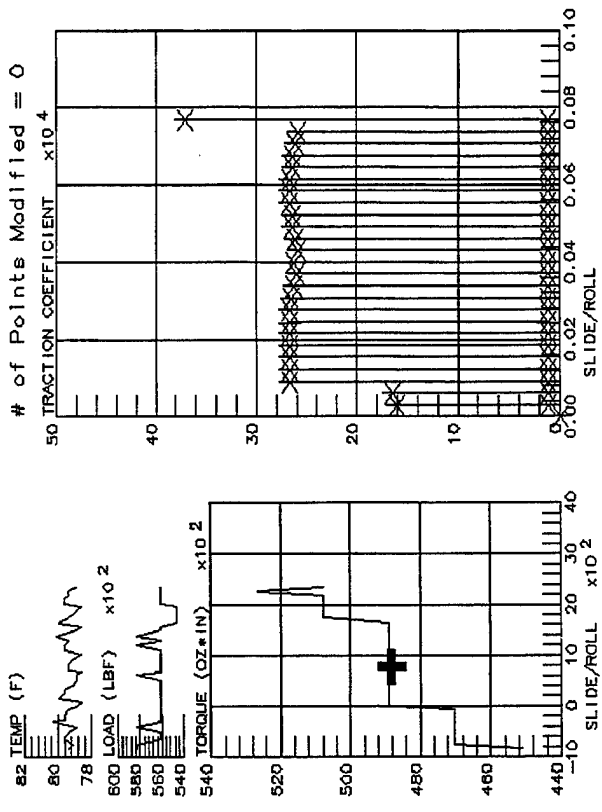
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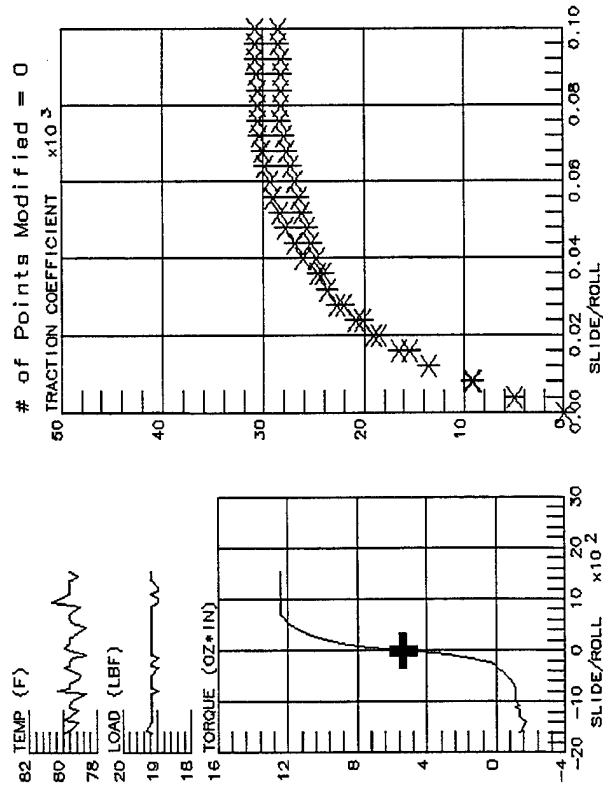
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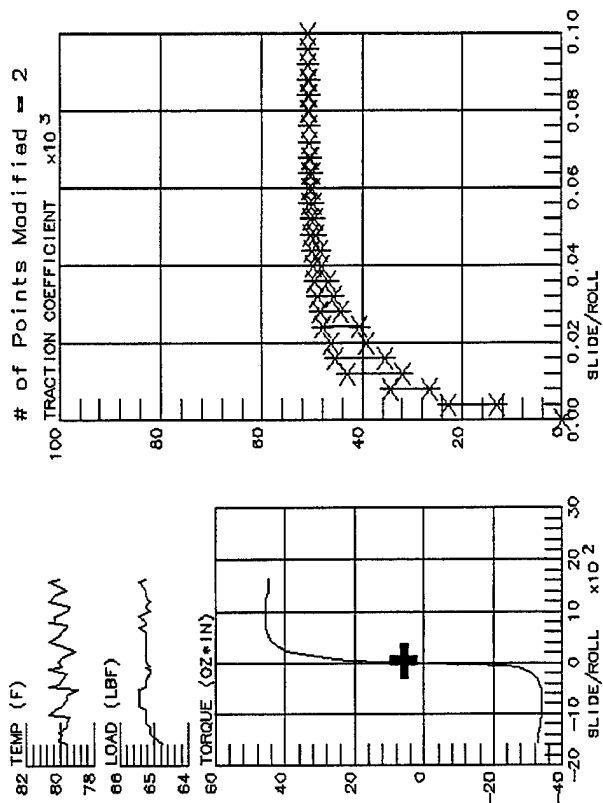
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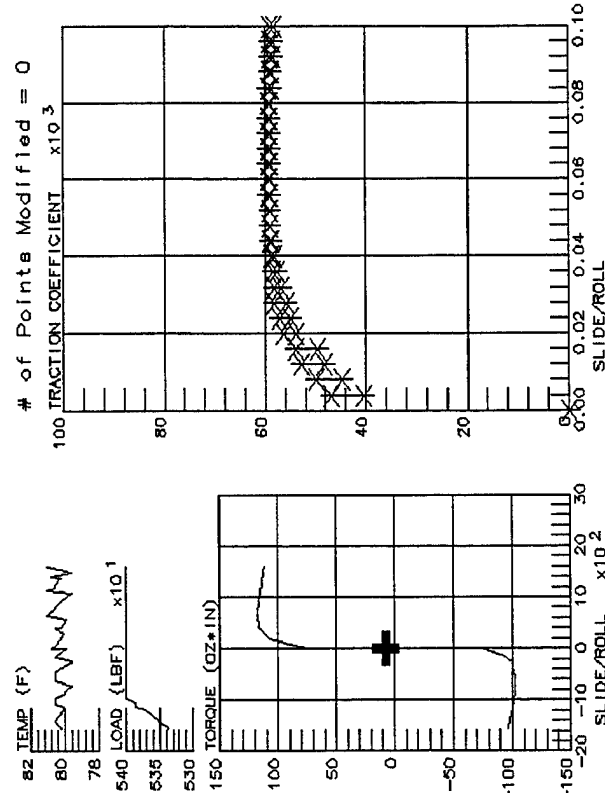
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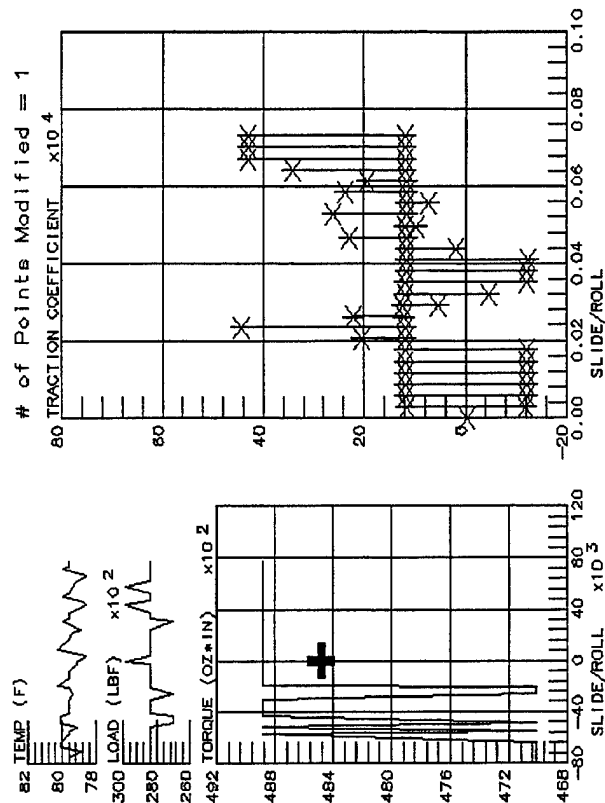
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80F 65LBF 1273RPM 14 FILE: 81-288b080



BO 81-288 ApiezonC+5%Bardhal(VacKote) #15
80F 154LBF 1273RPM 15 FILE: 81-288b080

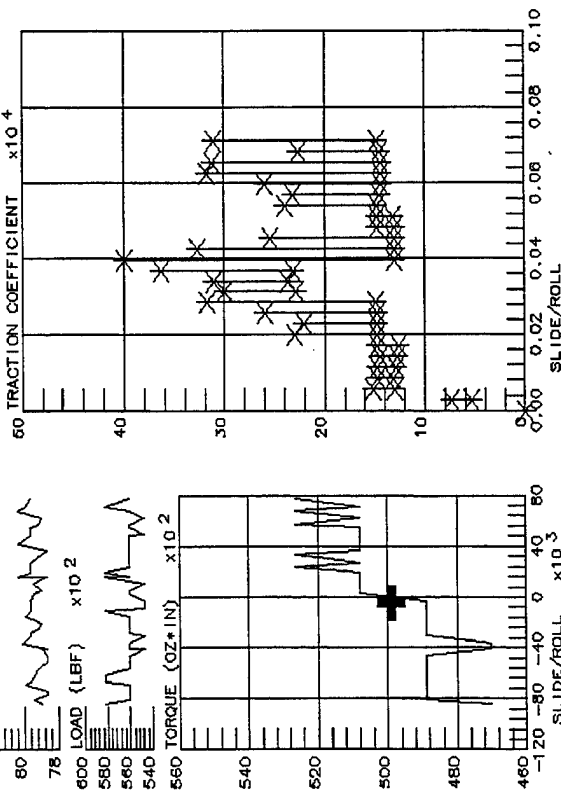


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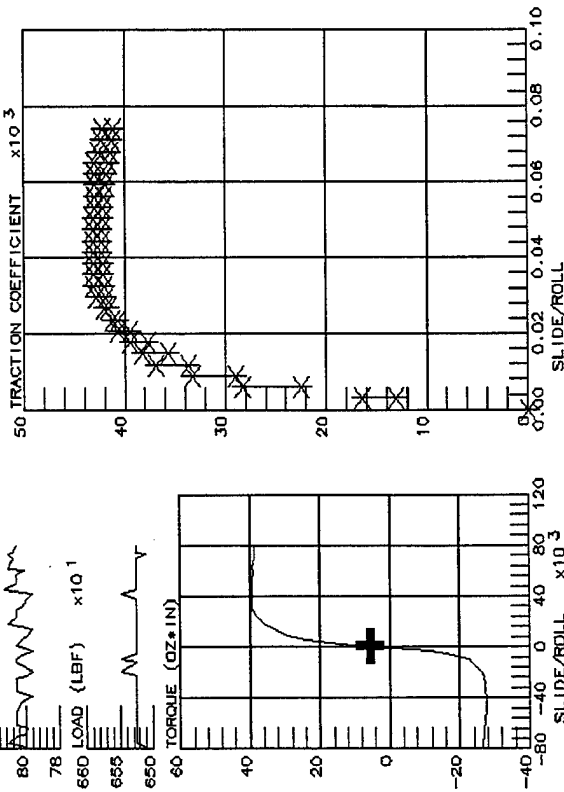
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of Points Modified = 1



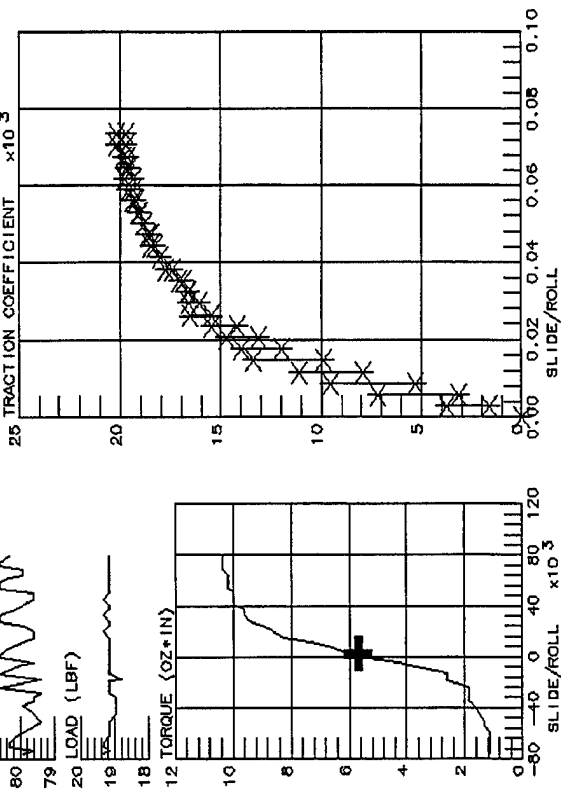
BO 81-288 ApiezonC+5%Bardhal(VacKote) #19
80F 65LBF 2546RPM 19 FILE: 81-288b080

of Points Modified = 2



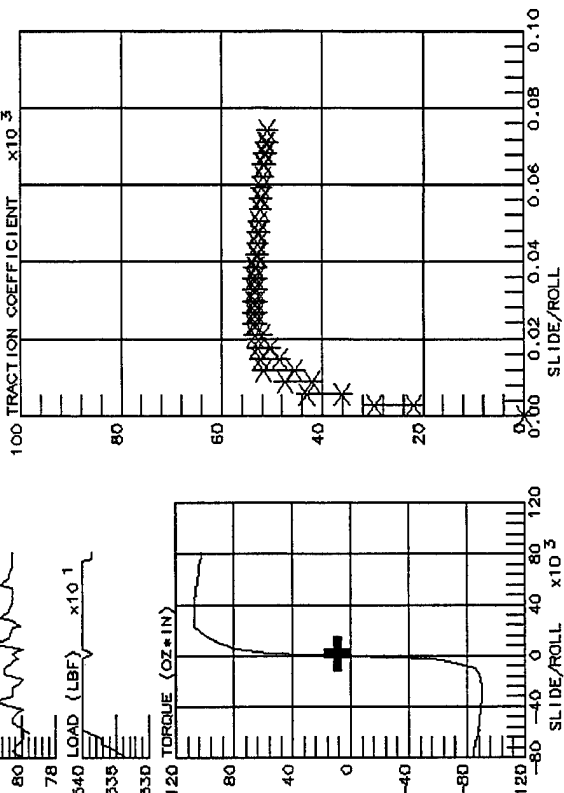
BO 81-288 ApiezonC+5%Bardhal(VacKote) #18
80F 19LBF 2546RPM 18 FILE: 81-288b080

of Points Modified = 0

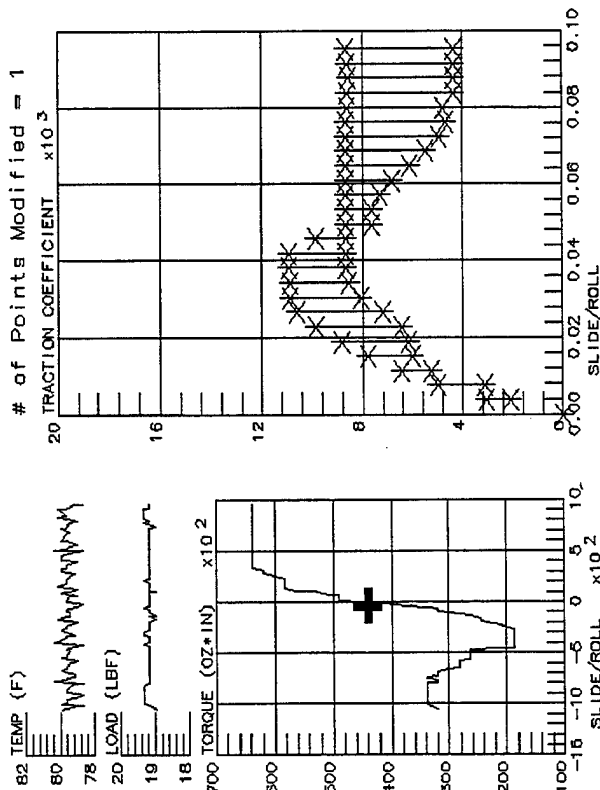


BO 81-288 ApiezonC+5%Bardhal(VacKote) #20
80F 154LBF 2546RPM 20 FILE: 81-288b080

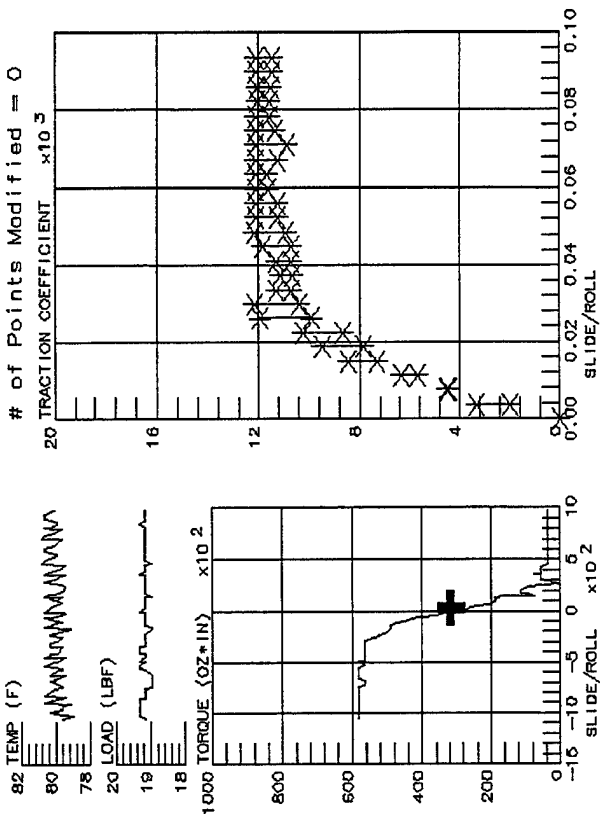
of Points Modified = 0



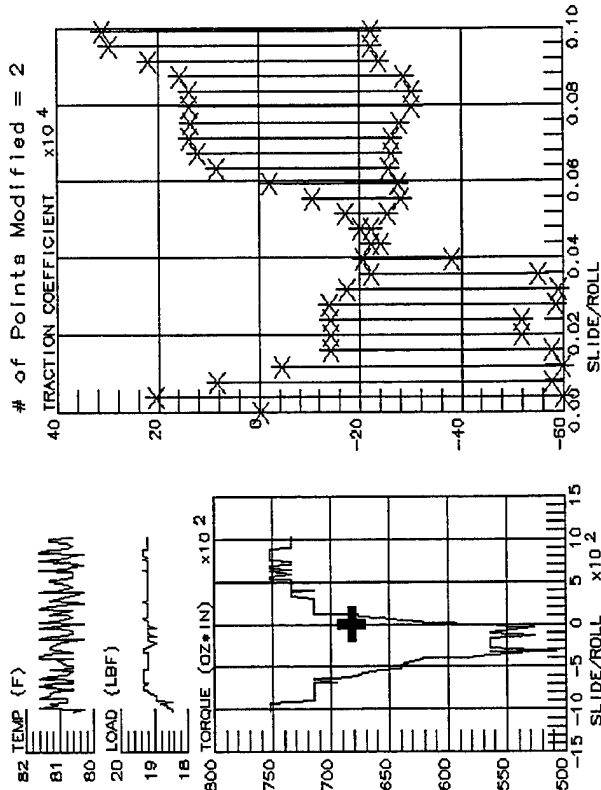
BO 81-288 ApiezonC+5%Bardhal(VacKote) #21
80F 19LBF 5093RPM 1 FILE: 81-288b080



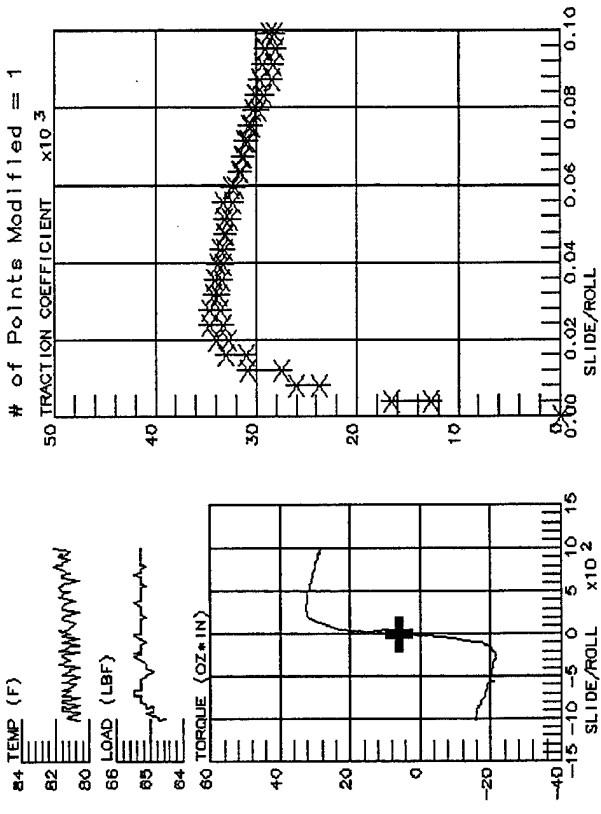
BO 81-288 ApiezonC+5%Bardhal(VacKote) #22
80F 19LBF 5093RPM 2 FILE: 81-288b080



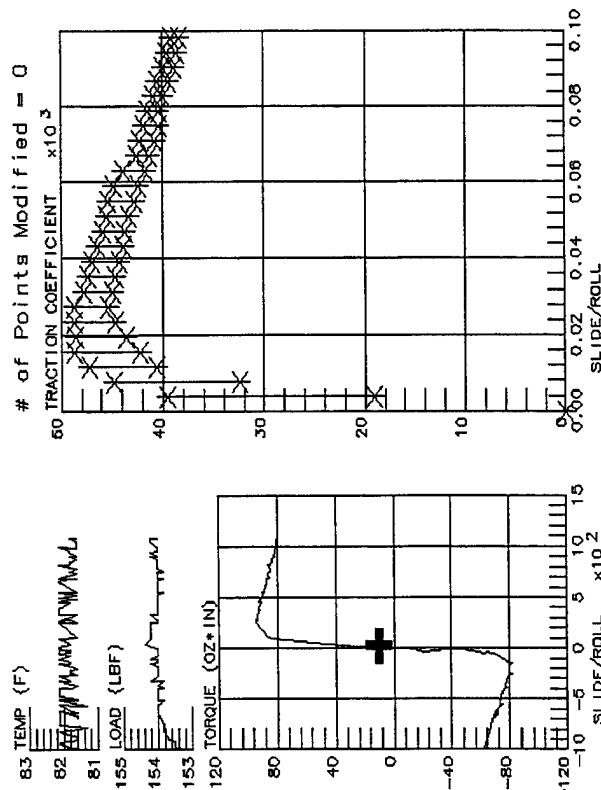
BO 81-288 ApiezonC+5%Bardhal(VacKote) #23
80F 19LBF 5093RPM 1 FILE: 81-288b080



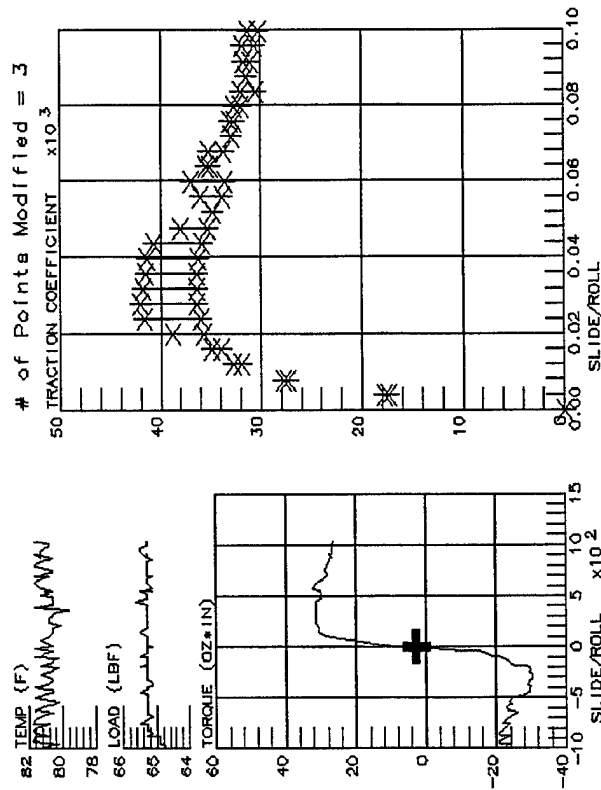
BO 81-288 ApiezonC+5%Bardhal(VacKote) #24
80F 65LBF 5093RPM 2 FILE: 81-288b080



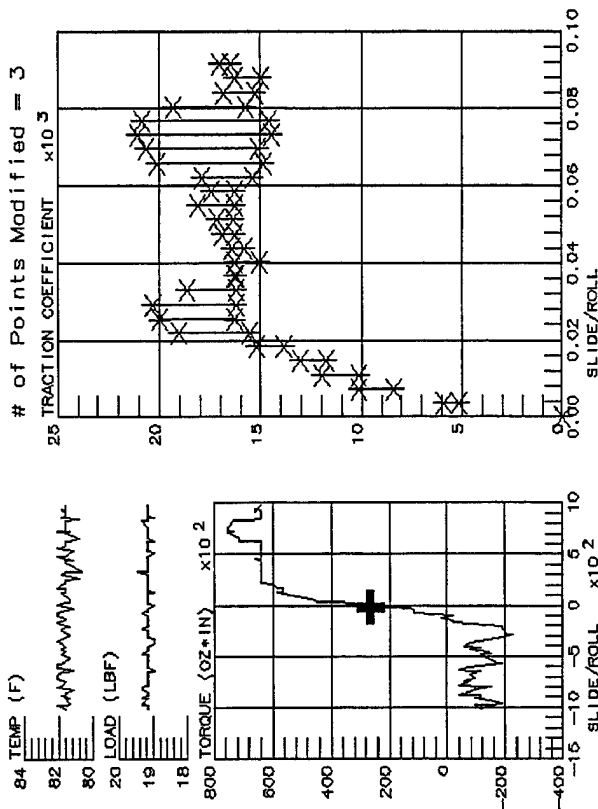
BO 81-288 ApiezonC+5%Bardhal(VacKote) #25
80F 154LBF 5093RPM 3 FILE: 81-288b080



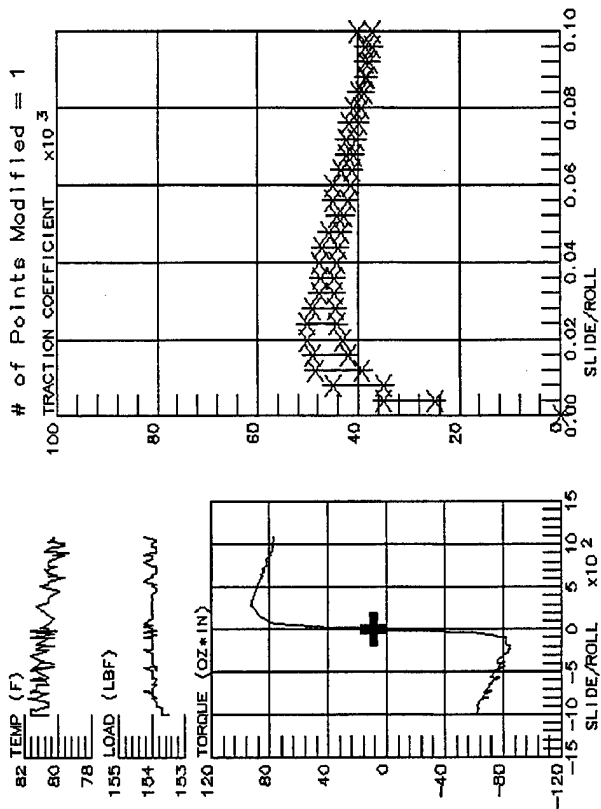
BO 81-288 ApiezonC+5%Bardhal(VacKote) #27
80F 65LBF 7639RPM 5 FILE: 81-288b080



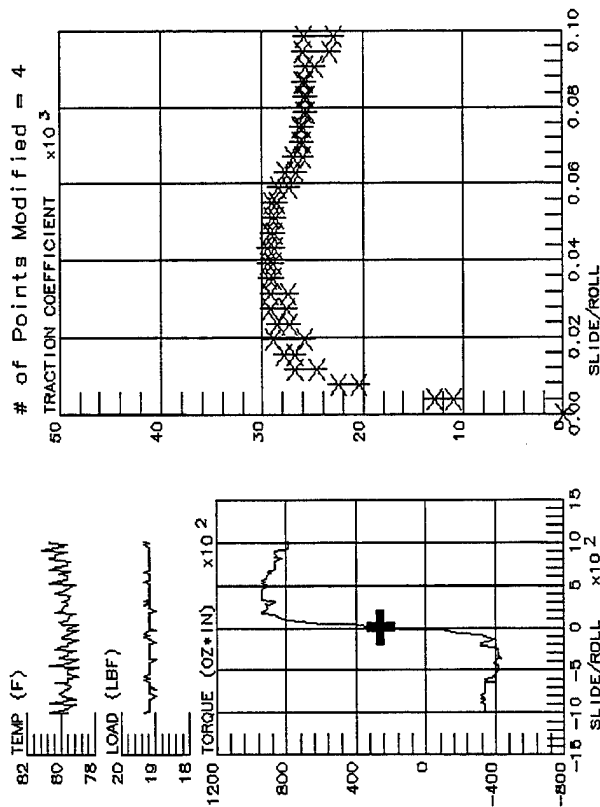
BO 81-288 ApiezonC+5%Bardhal(VacKote) #26
80F 19LBF 7639RPM 4 FILE: 81-288b080



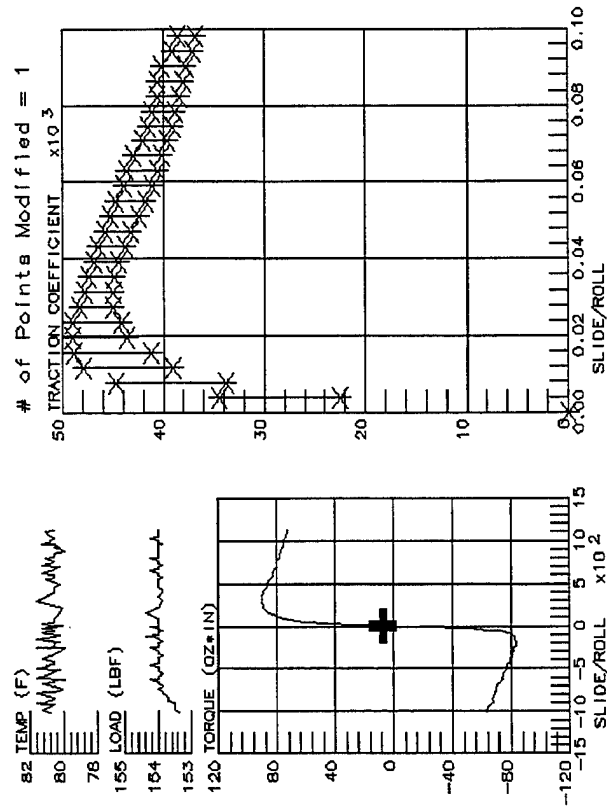
BO 81-288 ApiezonC+5%Bardhal(VacKote) #28
80F 154LBF 7639RPM 6 FILE: 81-288b080



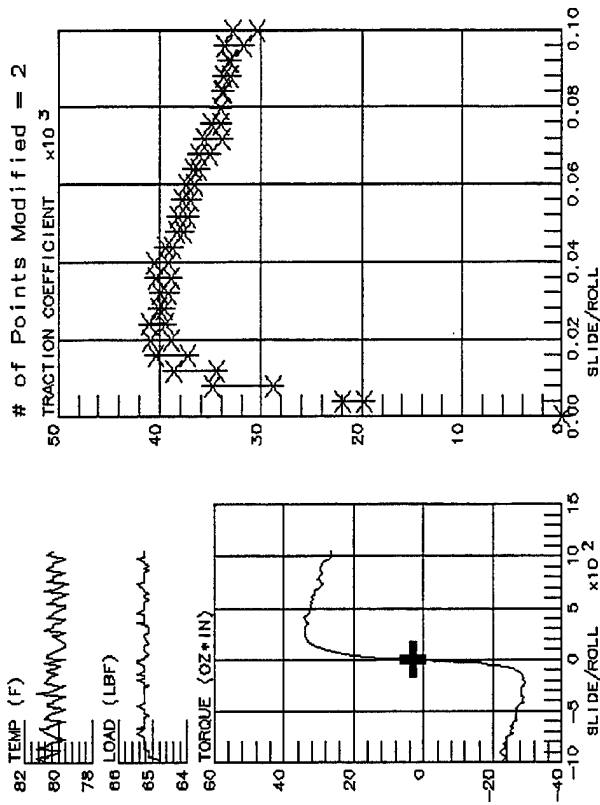
BO 81-288 ApiezonC+5%Bardhal(VacKote) #29
80F 19LBF 1018RPM 7 FILE: 81-288b080



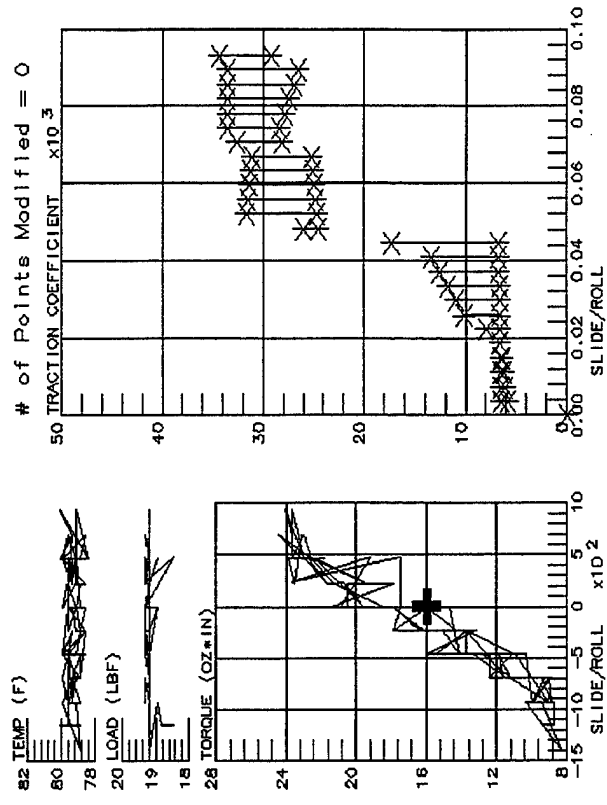
BO 81-288 ApiezonC+5%Bardhal(VacKote) #31
80F 154LBF 1018RPM 9 FILE: 81-288b080



BO 81-288 ApiezonC+5%Bardhal(VacKote) #30
80F 65LBF 1018RPM 8 FILE: 81-288b080

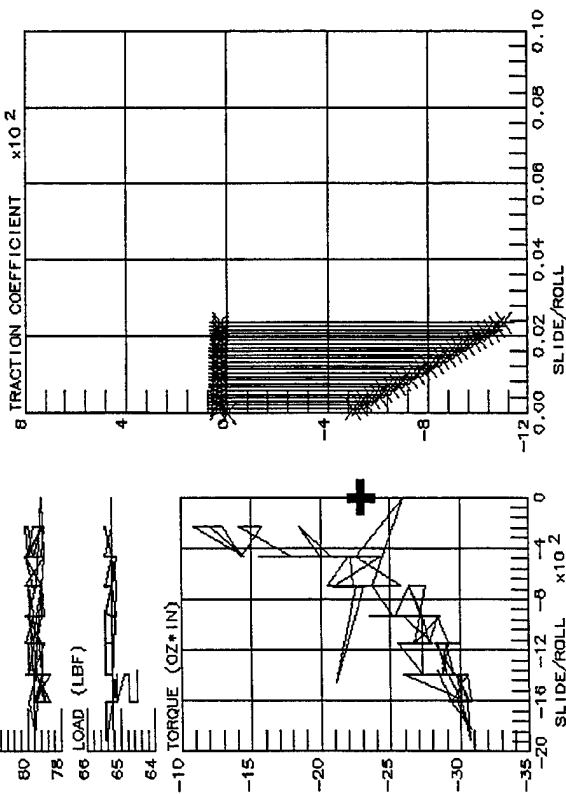


BO 81-288 ApiezonC+5%Bardhal(VacKote) #32
80F 19LBF 318RPM 1 FILE: 81-288b080



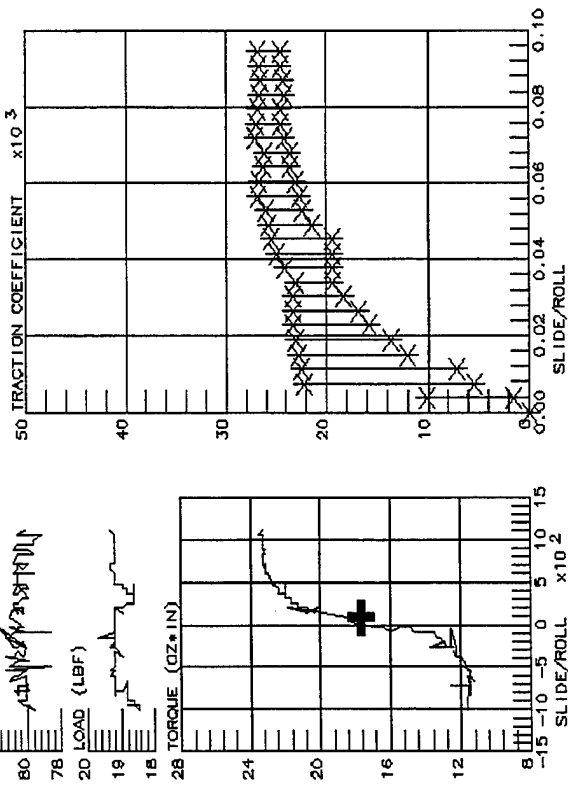
BO 81-288 ApiezonC+5%Bardhal(VacKote) #33
80F 65LBF 318RPM 2 FILE: 81-288b080

of Points Modified = 0



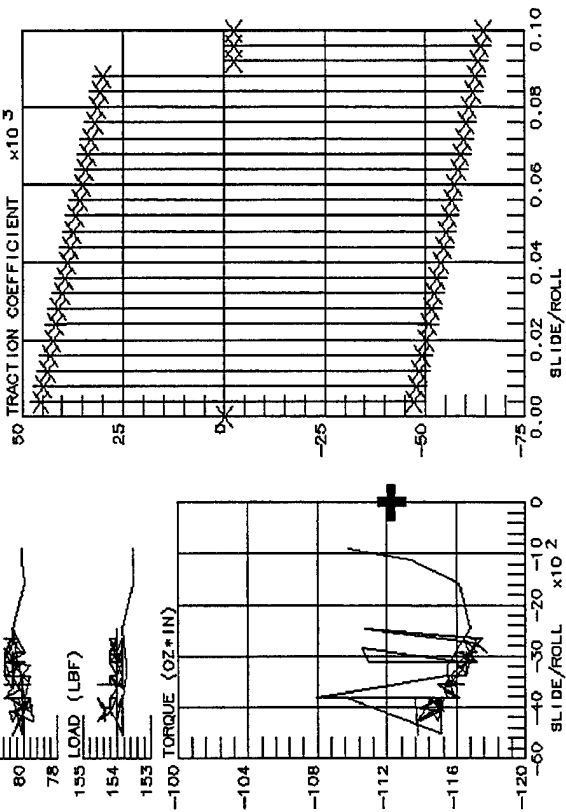
BO 81-288 ApiezonC+5%Bardhal(VacKote) #35
80F 19LBF 1273RPM 4 FILE: 81-288b080

of Points Modified = 0



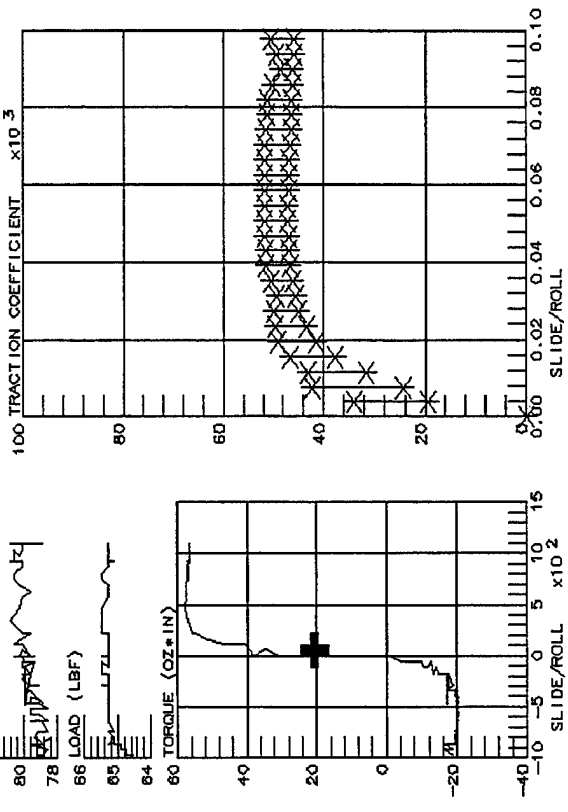
BO 81-288 ApiezonC+5%Bardhal(VacKote) #34
80F 164LBF 318RPM 3 FILE: 81-288b080

of Points Modified = 1

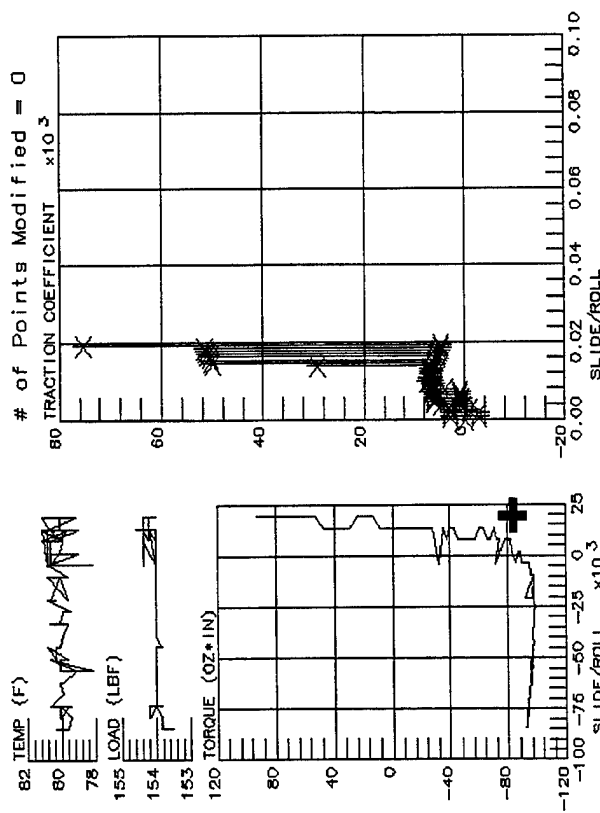


BO 81-288 ApiezonC+5%Bardhal(VacKote) #36
80F 65LBF 1273RPM 5 FILE: 81-288b080

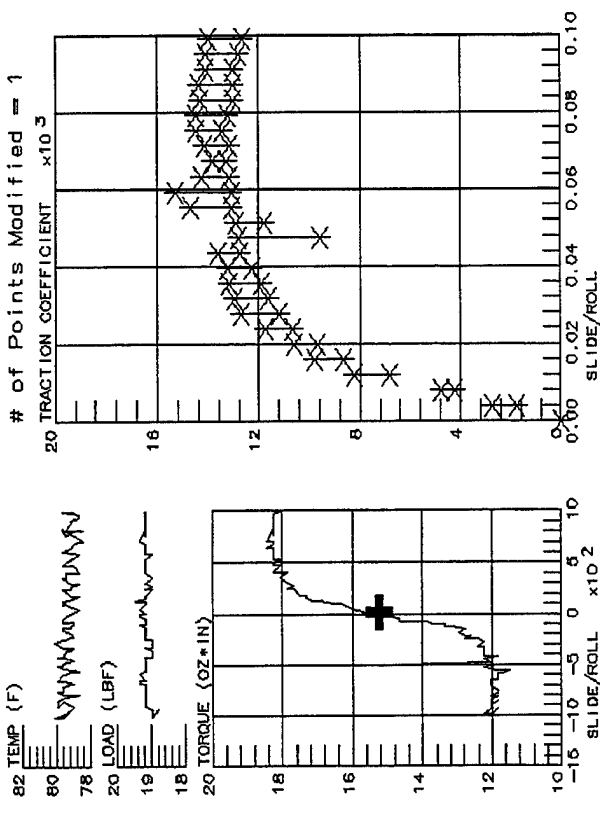
of Points Modified = 0



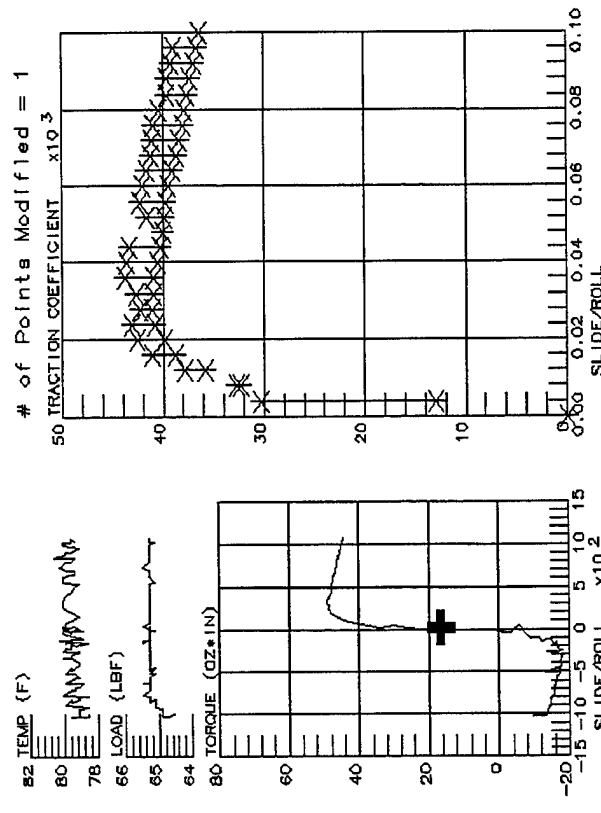
BO 81-288 ApiezonC+5%Bardhal(VacKote) #37
BOF 154LBF 1273RPM 8 FILE: 81-288b080



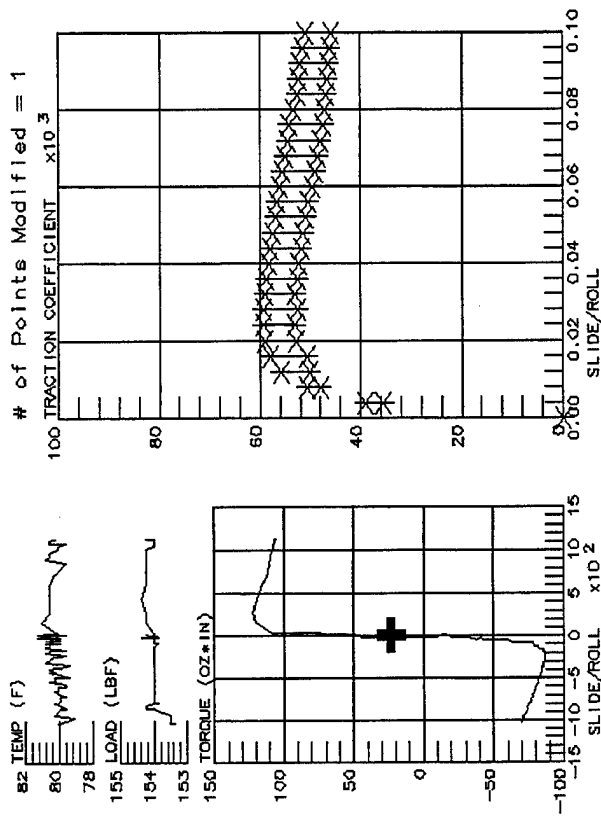
BO 81-288 ApiezonC+5%Bardhal(VacKote) #38
BOF 19LBF 2546RPM 7 FILE: 81-288b080



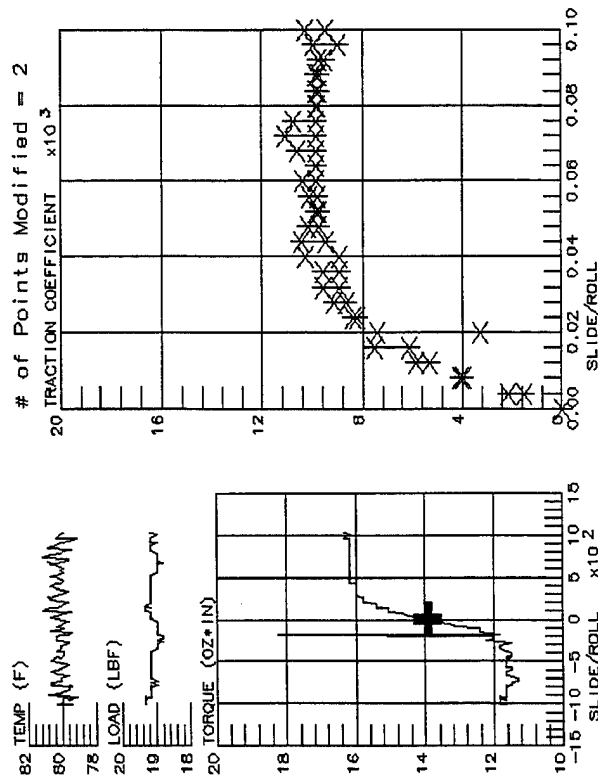
BO 81-288 ApiezonC+5%Bardhal(VacKote) #39
BOF 65LBF 2546RPM 8 FILE: 81-288b080



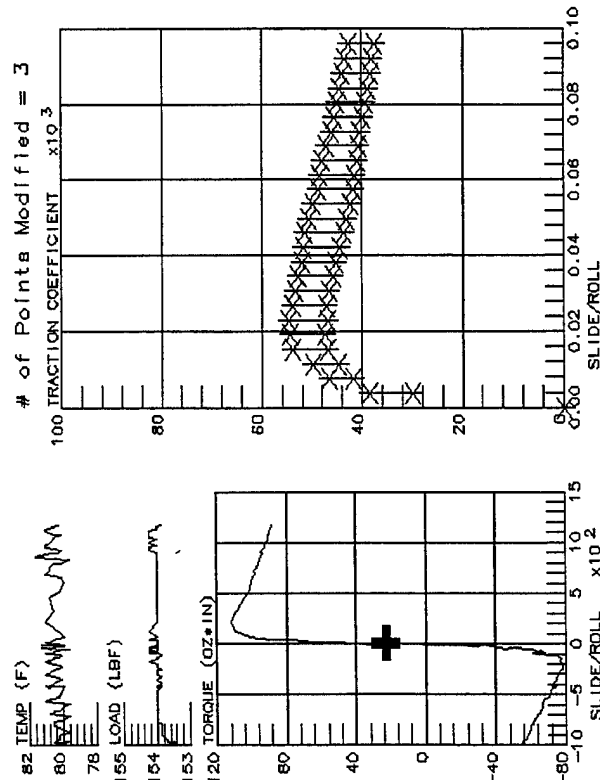
BO 81-288 ApiezonC+5%Bardhal(VacKote) #40
BOF 154LBF 2546RPM 9 FILE: 81-288b080



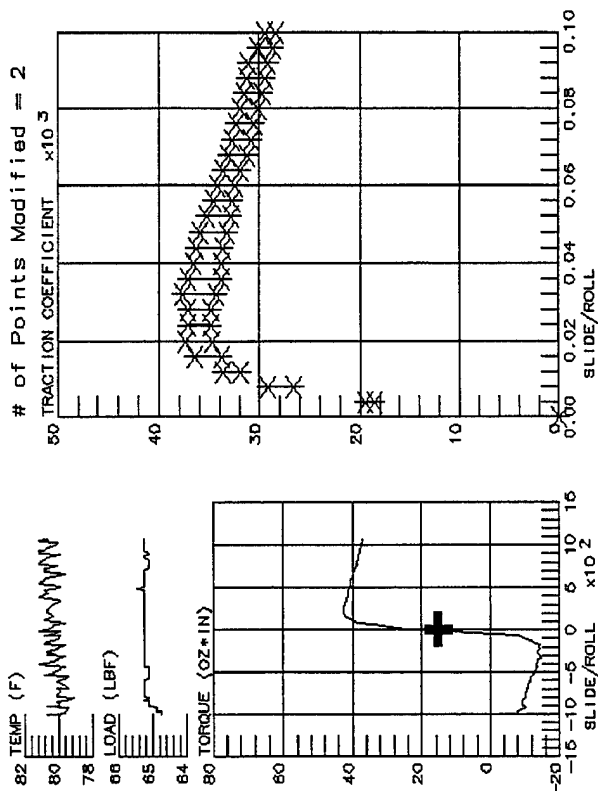
BO 81-288 ApiezonC+5%Bardhal(VacKote) #41
80F 19LBF 5093RPM 10 FILE: 81-288b080



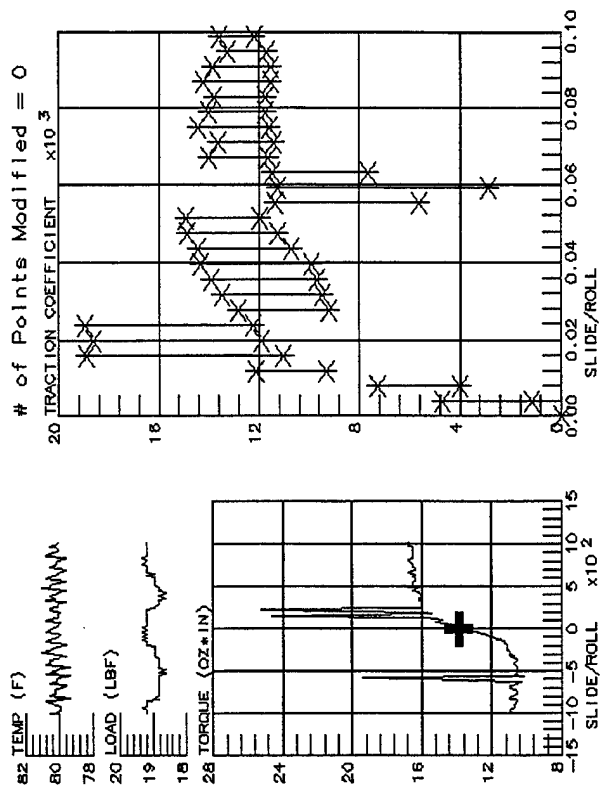
BO 81-288 ApiezonC+5%Bardhal(VacKote) #43
80F 154LBF 5093RPM 12 FILE: 81-288b080



BO 81-288 ApiezonC+5%Bardhal(VacKote) #42
80F 65LBF 5093RPM 11 FILE: 81-288b080

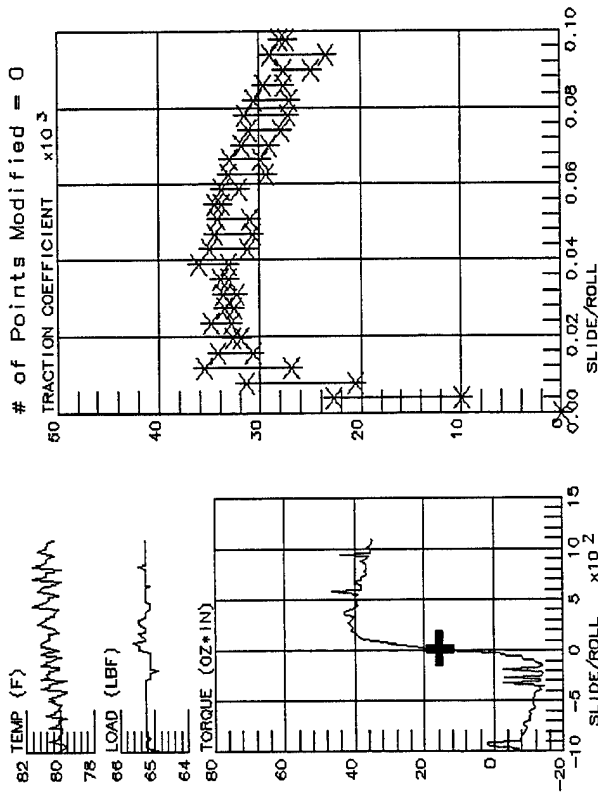


BO 81-288 ApiezonC+5%Bardhal(VacKote) #44
80F 19LBF 7639RPM 13 FILE: 81-288b080

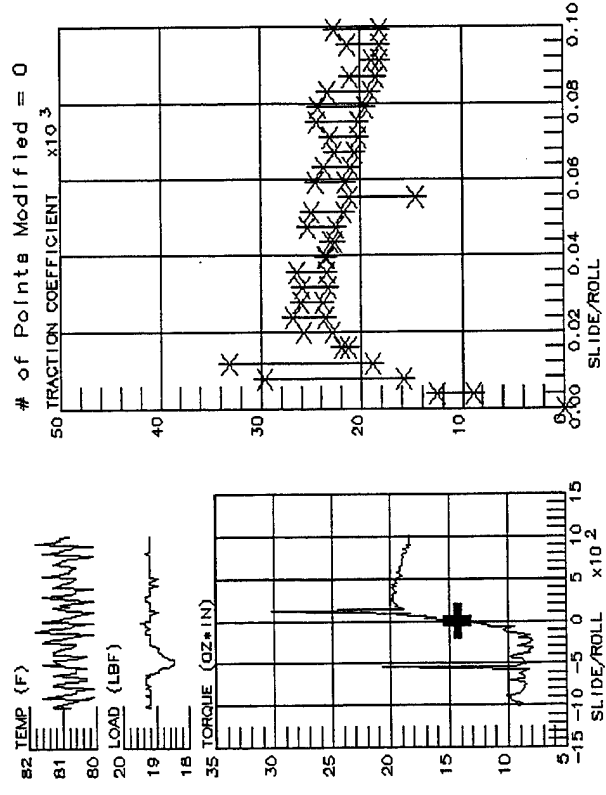


TRACTION MODELING

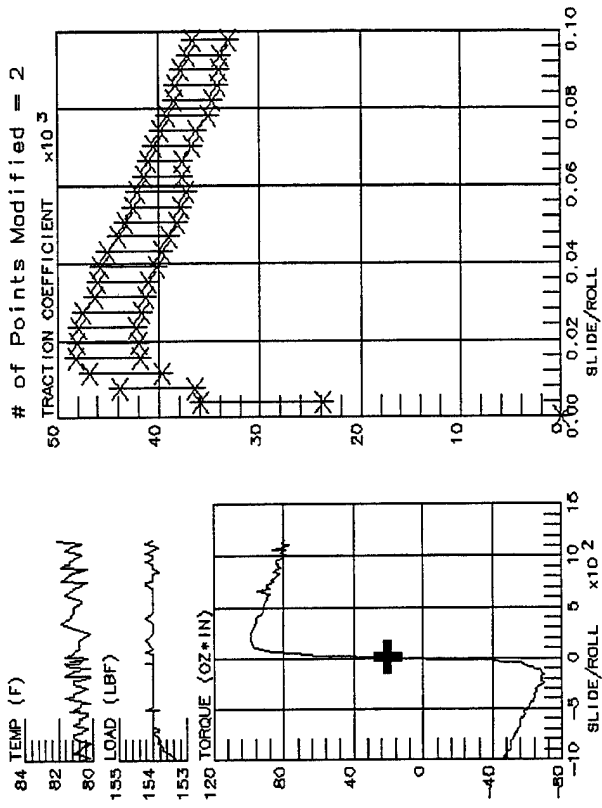
BO 81-288 ApiezonC+5%Bardhal(Vackote) #45
80F 65LBF 7639RPM 14 FILE: 81-288b080



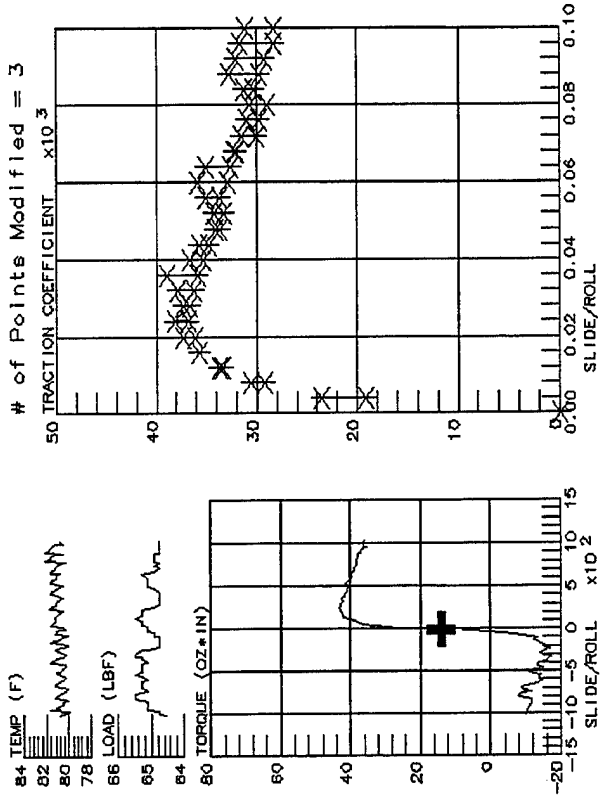
BO 81-288 ApiezonC+5%Bardhal(Vackote) #47
80F 19LBF 1018RPM 16 FILE: 81-288b080



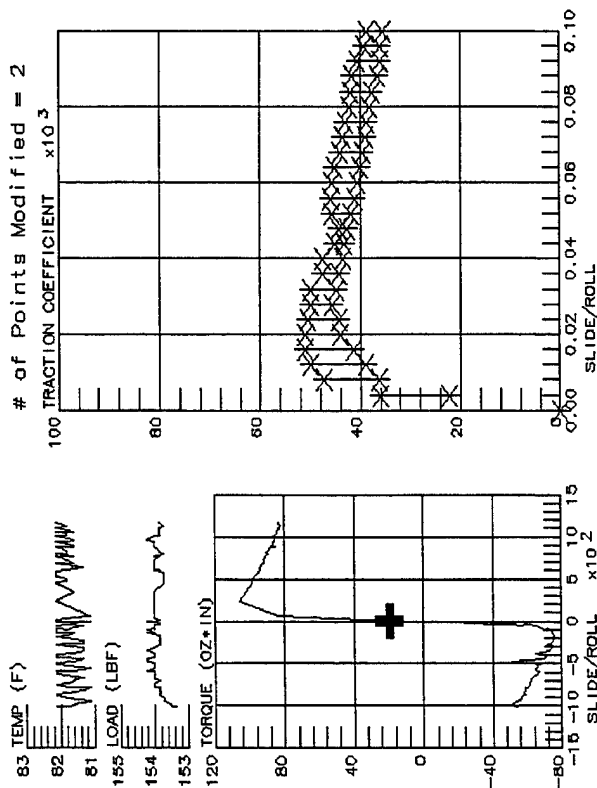
BO 81-288 ApiezonC+5%Bardhal(Vackote) #46
80F 164LBF 7639RPM 15 FILE: 81-288b080



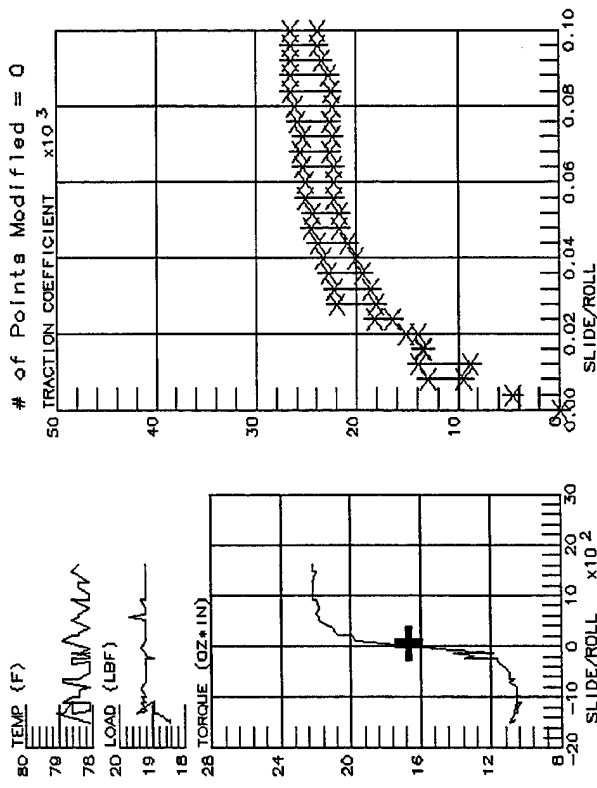
BO 81-288 ApiezonC+5%Bardhal(Vackote) #48
80F 65LBF 1018RPM 17 FILE: 81-288b080



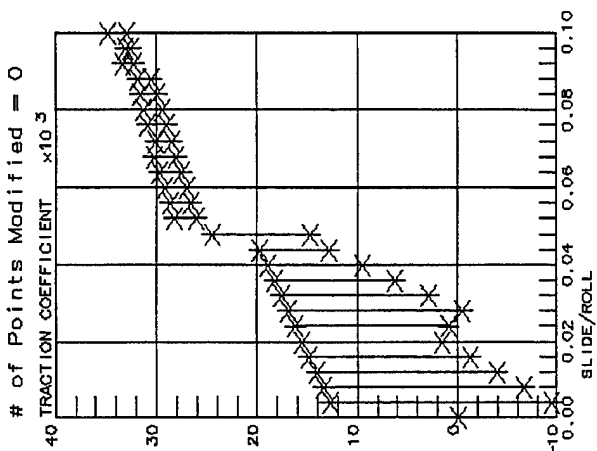
BO 81-288 ApiezonC+5%Bardhal(VacKote) #49
80F 154LBF 1018RPM 18 FILE: 81-288b080



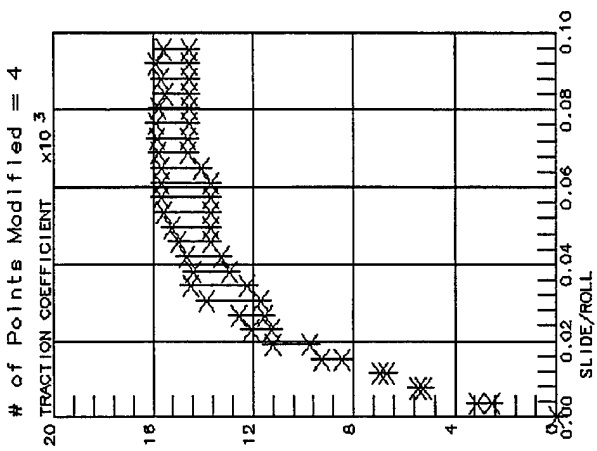
BO 81-288 ApiezonC+5%Bardhal(VacKote) #51
80F 19LBF 1273RPM 2 FILE: 81-288b080



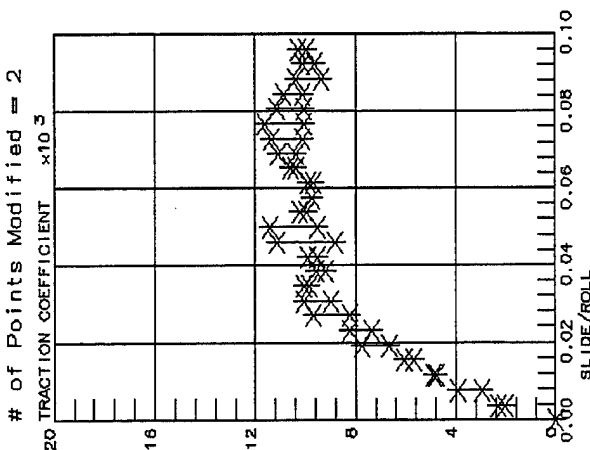
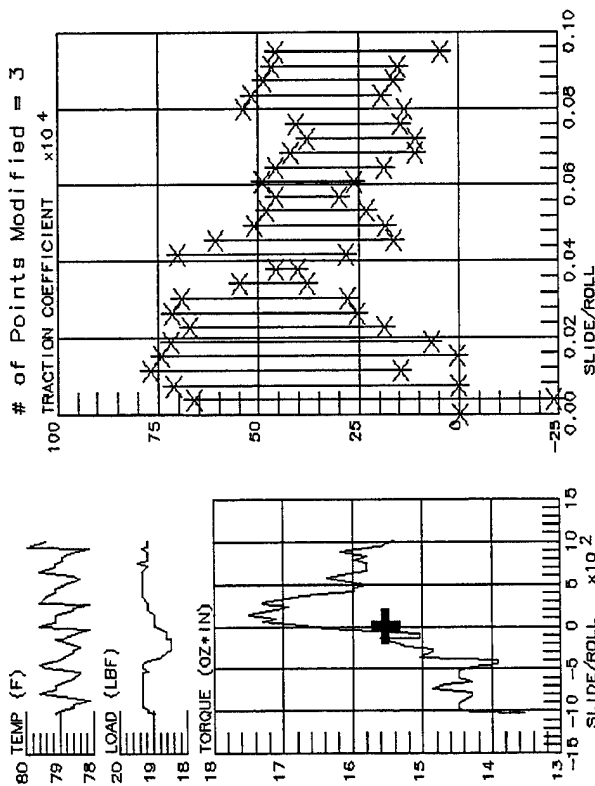
BO 81-288 ApiezonC+5%Bardhal(VacKote) #50
80F 19LBF 318RPM 1 FILE: 81-288b080



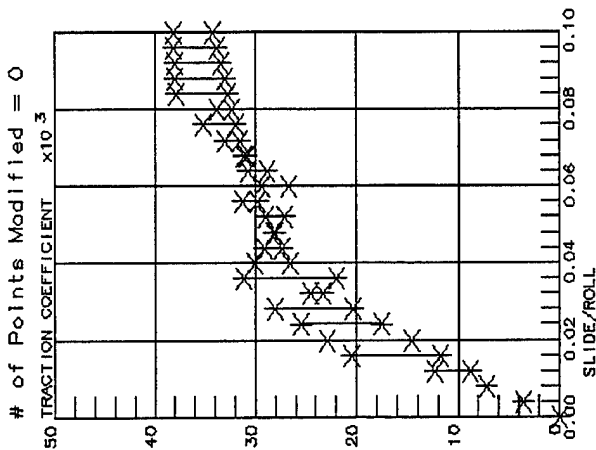
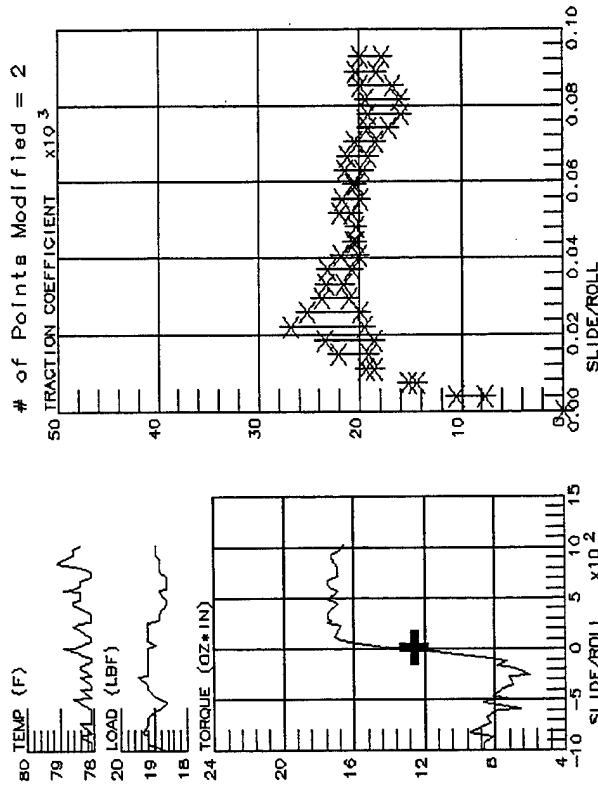
BO 81-288 ApiezonC+5%Bardhal(VacKote) #52
80F 19LBF 2546RPM 3 FILE: 81-288b080



BO 81-288 ApiezonC+5%Bardhal (VacKote) #53
80F 19LBF 5093RPM 4 FILE: 81-288b080

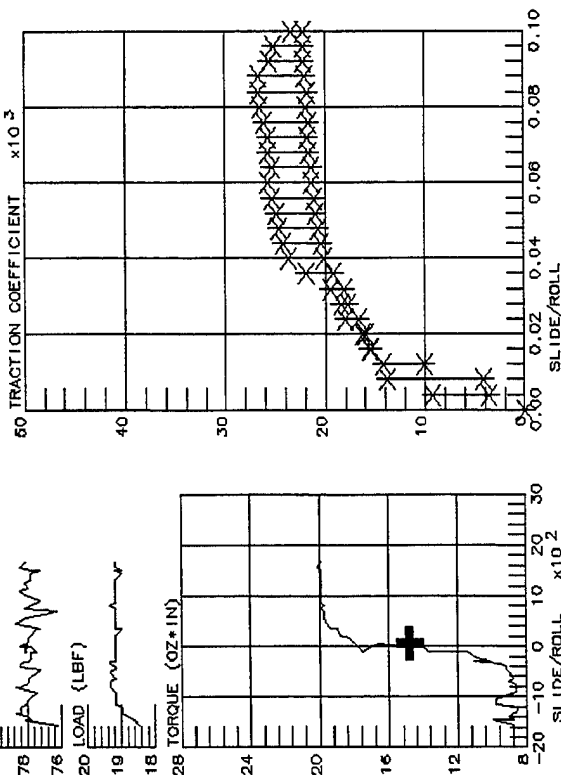


BO 81-288 ApiezonC+5%Bardhal (VacKote) #55
80F 19LBF 10186RPM 6 FILE: 81-288b080



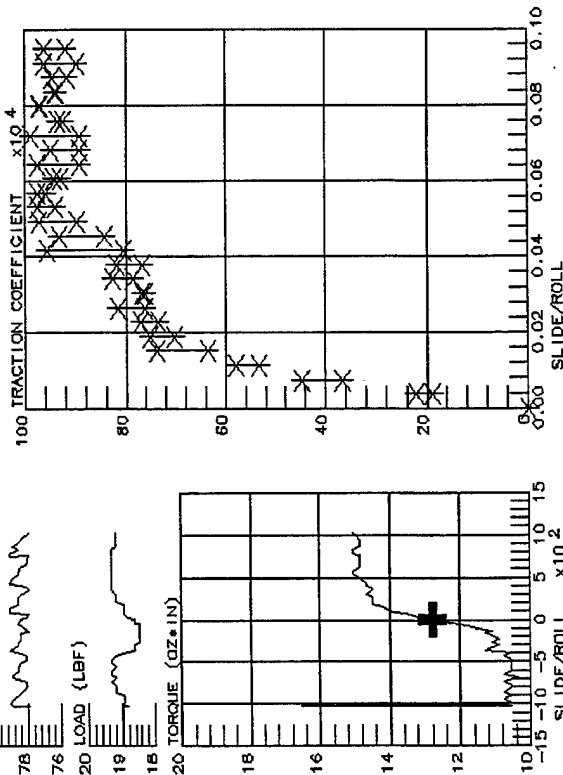
BO 81-288 ApiezonC+5%Bardhal(VacKote) #57
80F 19LBF 1273RPM 2 FILE: 81-288b080

of Points Modified = 1



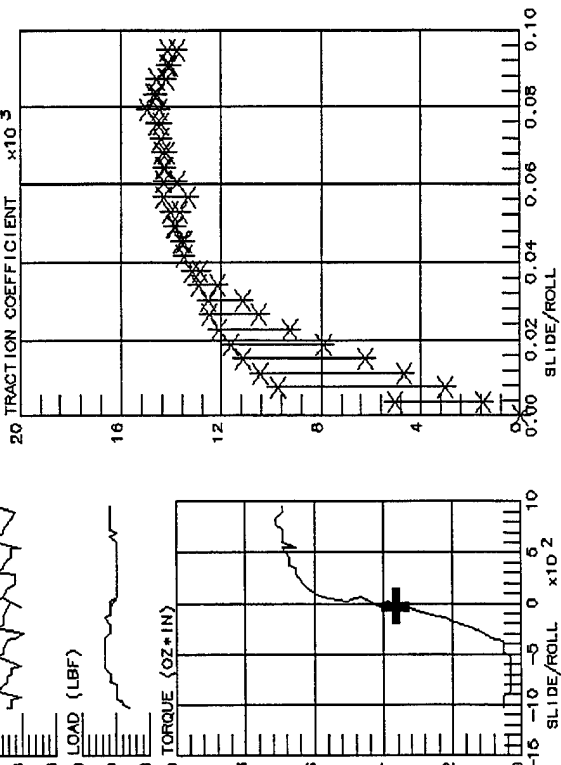
BO 81-288 ApiezonC+5%Bardhal(VacKote) #58
80F 19LBF 318RPM 1 FILE: 81-288b080

of Points Modified = 0



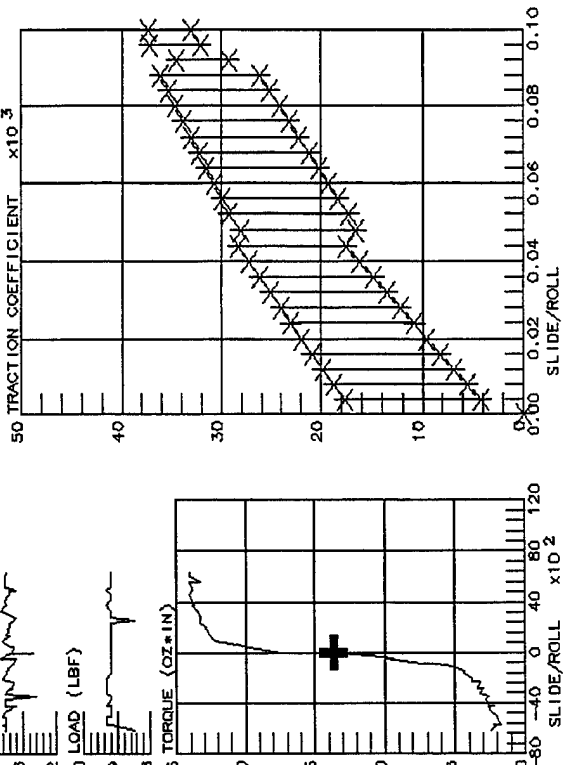
BO 81-288 ApiezonC+5%Bardhal(VacKote) #58
80F 19LBF 2546RPM 3 FILE: 81-288b080

of Points Modified = 4

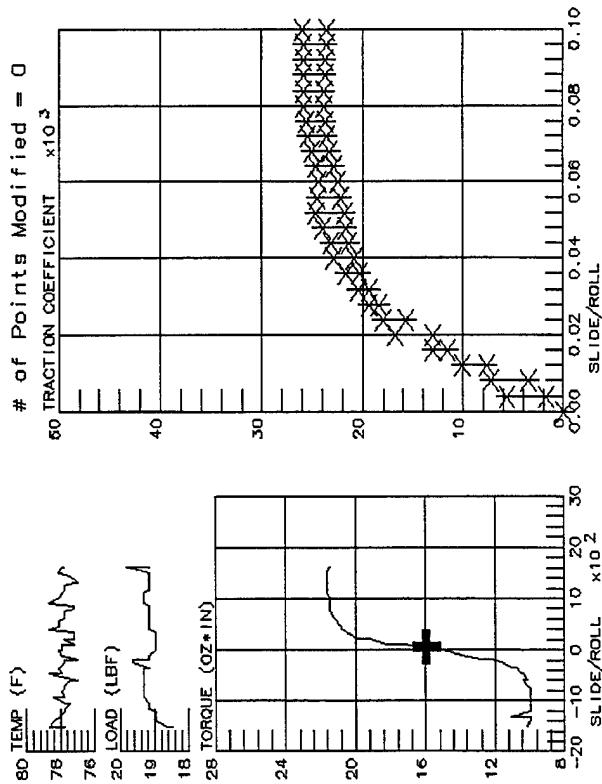


BO 81-288 ApiezonC+5%Bardhal(VacKote) #80
80F 19LBF 318RPM 1 FILE: 81-288b080

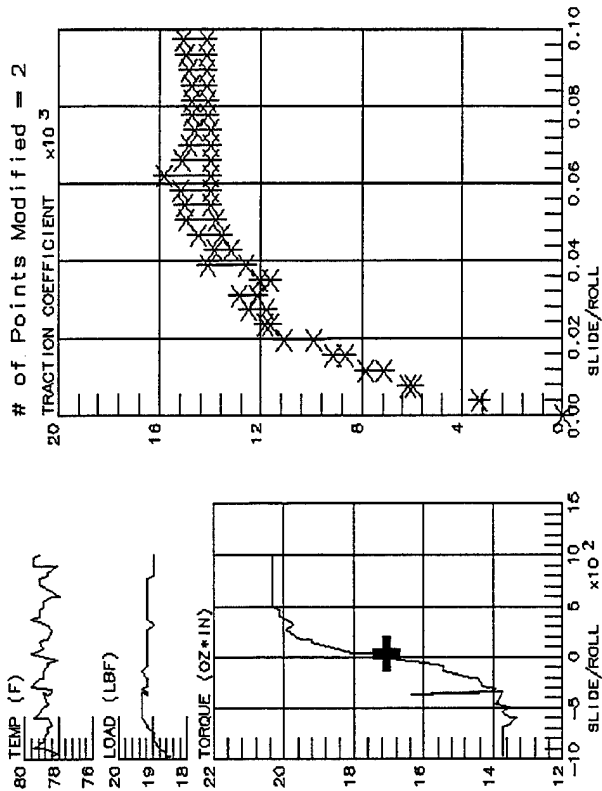
of Points Modified = 0



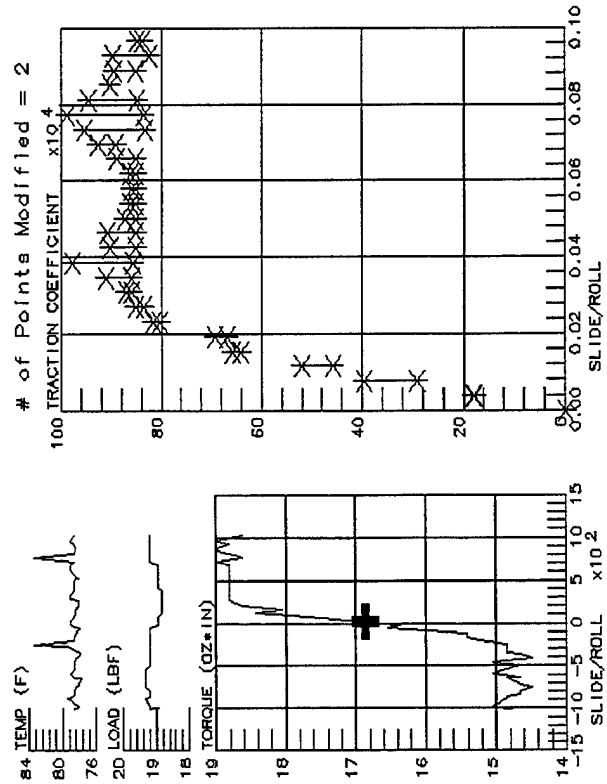
BO 81-288 ApiezonC+5%Bardhal(VacKote) #61
80F 19LBF 1273RPM 2 FILE: 81-288b080



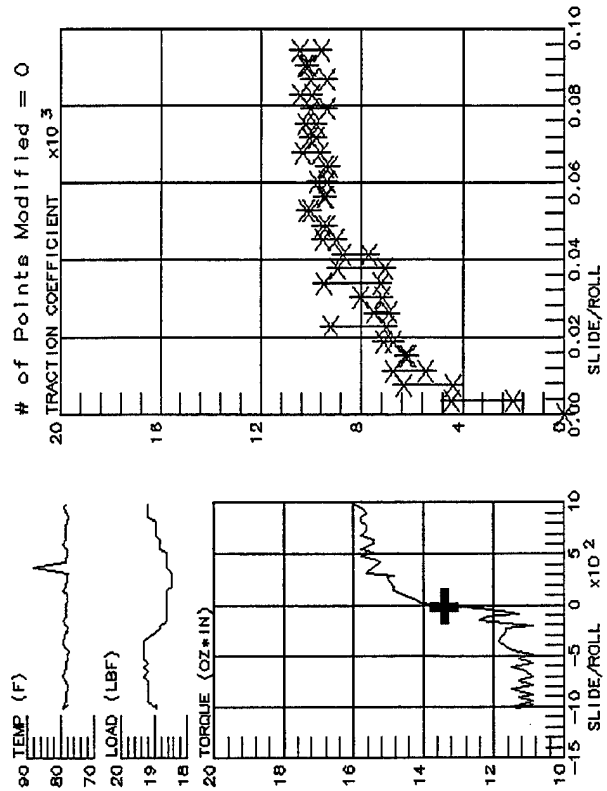
BO 81-288 ApiezonC+5%Bardhal(VacKote) #62
80F 19LBF 2546RPM 3 FILE: 81-288b080



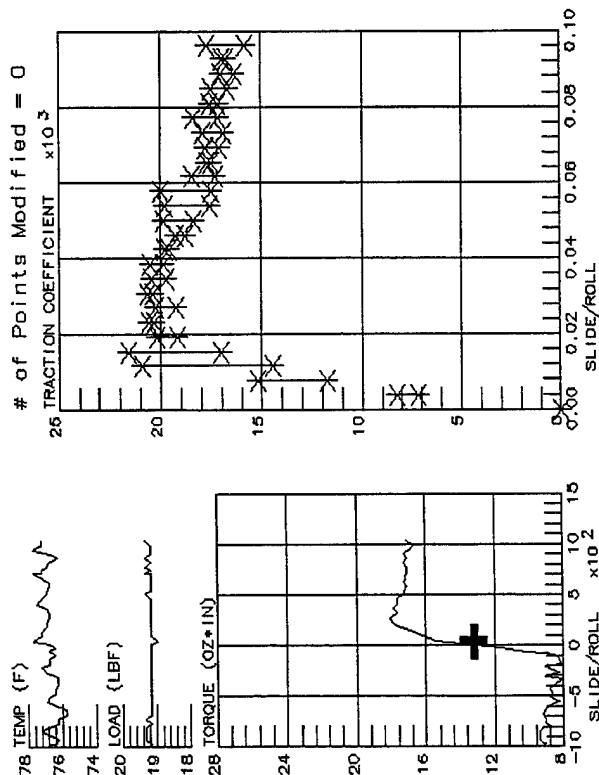
BO 81-288 ApiezonC+5%Bardhal(VacKote) #63
80F 19LBF 5093RPM 4 FILE: 81-288b080



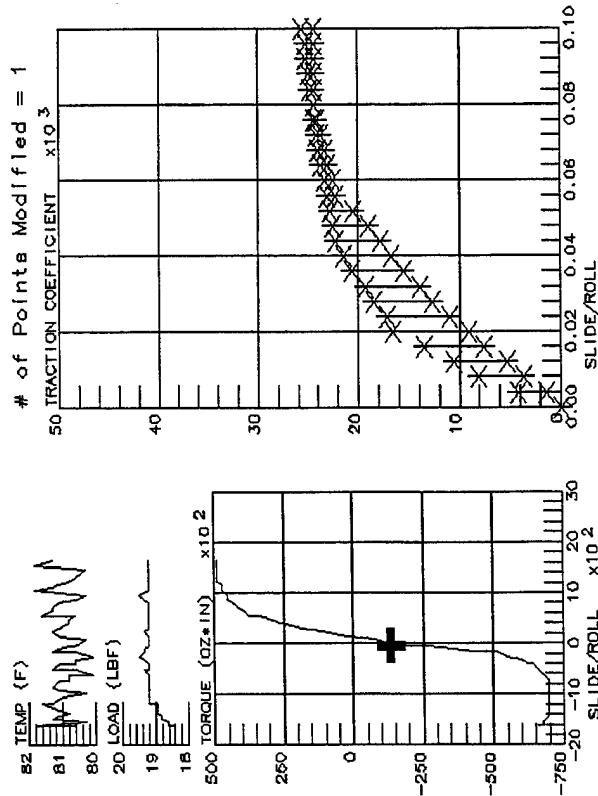
BO 81-288 ApiezonC+5%Bardhal(VacKote) #64
80F 19LBF 7639RPM 5 FILE: 81-288b080



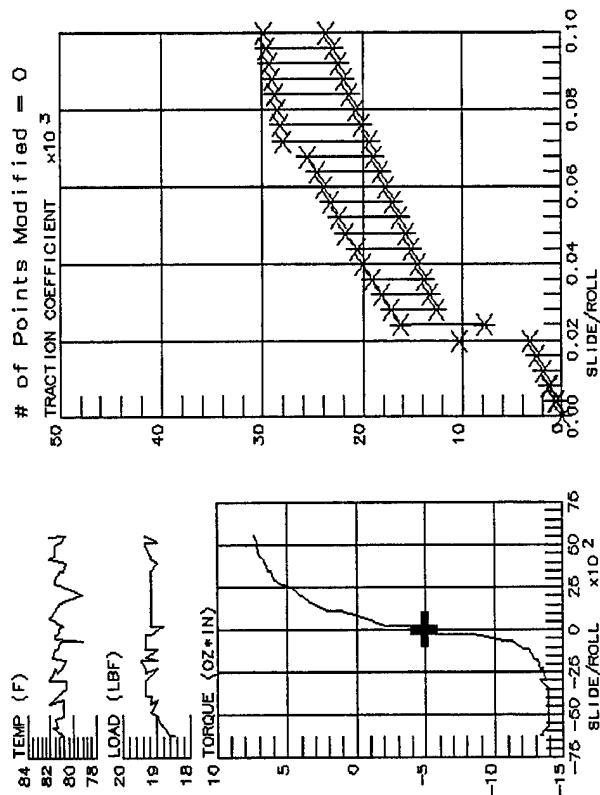
BO 81-288 ApiezonC+5%Bardhal(VacKote) #65
80F 19LBF 1018RPM 6 FILE: 81-288b080



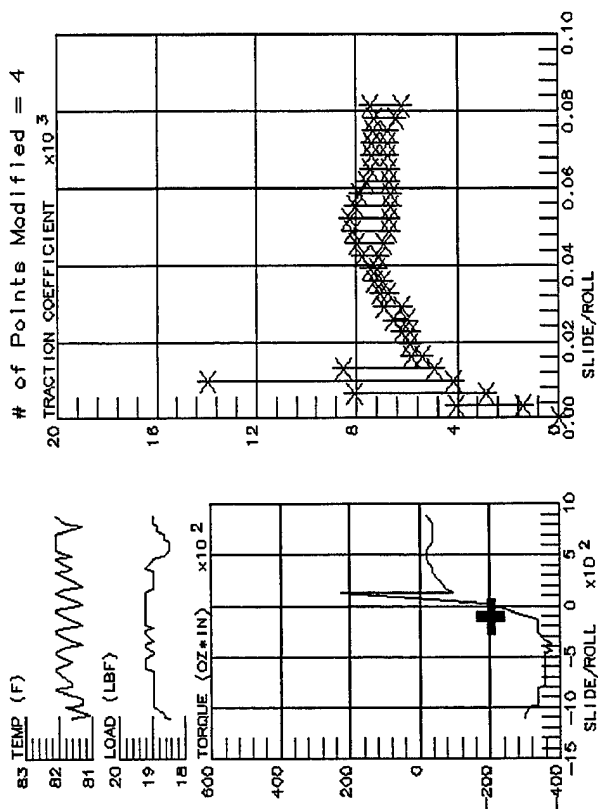
BO 81-288 ApiezonC+5%Bardhal(VacKote) #67
80F 19LBF 1273RPM 2 FILE: 81-288b080



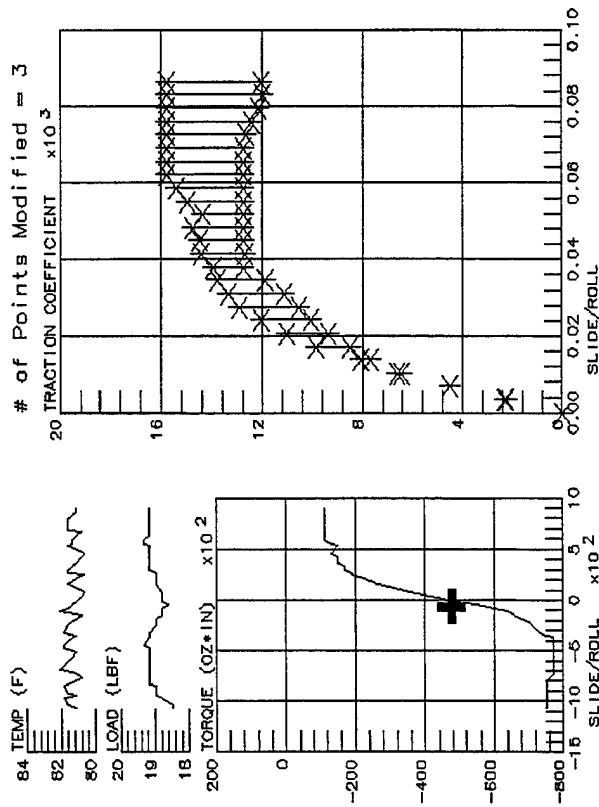
BO 81-288 ApiezonC+5%Bardhal(VacKote) #66
80F 19LBF 318RPM 1 FILE: 81-288b080



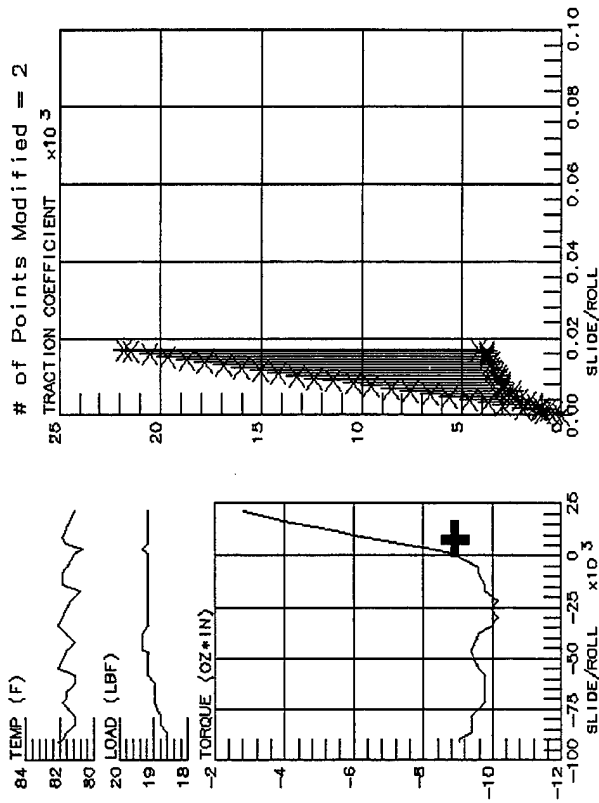
BO 81-288 ApiezonC+5%Bardhal(VacKote) #68
80F 19LBF 5093RPM 4 FILE: 81-288b080



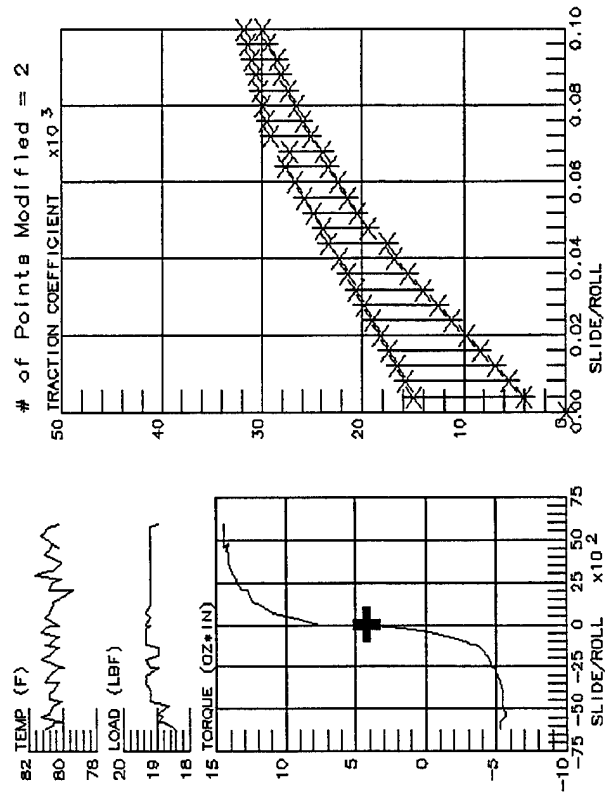
BO 81-288 ApiezonC+5%Bardhal(VacKote) #69
80F 19LBF 7639RPM 5 FILE: 81-288b080



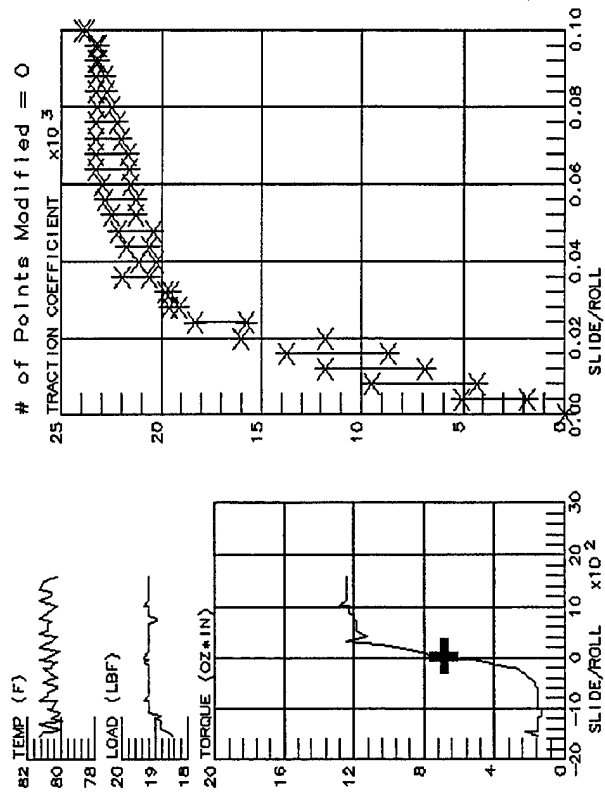
BO 81-288 ApiezonC+5%Bardhal(VacKote) #70
80F 19LBF 10186RPM 6 FILE: 81-288b080



BO 81-288 ApiezonC+5%Bardhal(VacKote) #71
80F 19LBF 316RPM 1 FILE: 81-288b080

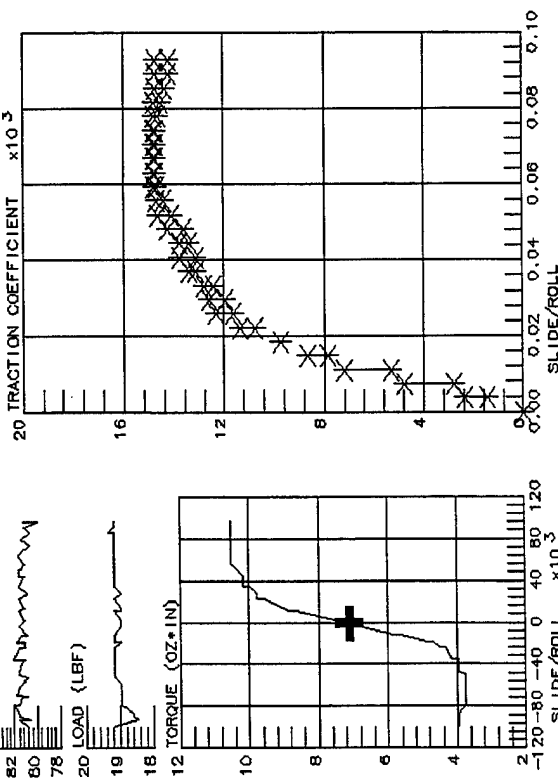


BO 81-288 ApiezonC+5%Bardhal(VacKote) #72
80F 19LBF 1273RPM 2 FILE: 81-288b080



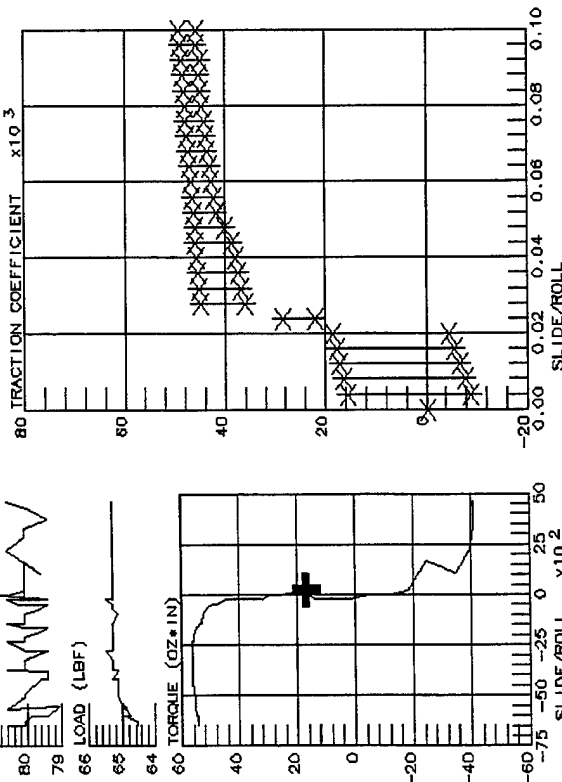
BO 81-288 ApiezonC+5%Bardhal(VacKote) #73
80F 19LBF 2646RPM 3 FILE: 81-288b080

of Points Modified = 0



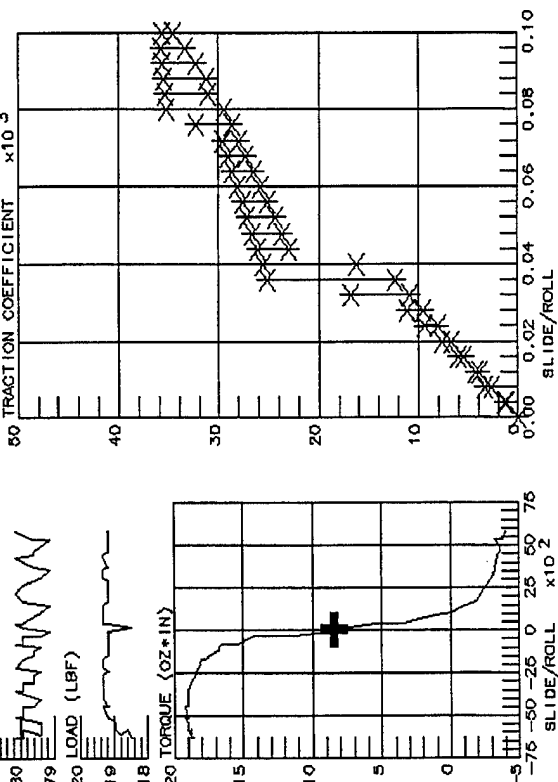
BO 81-288 ApiezonC+5%Bardhal(VacKote) #75
80F 65LBF 316RPM 2 FILE: 81-288b080

of Points Modified = 1



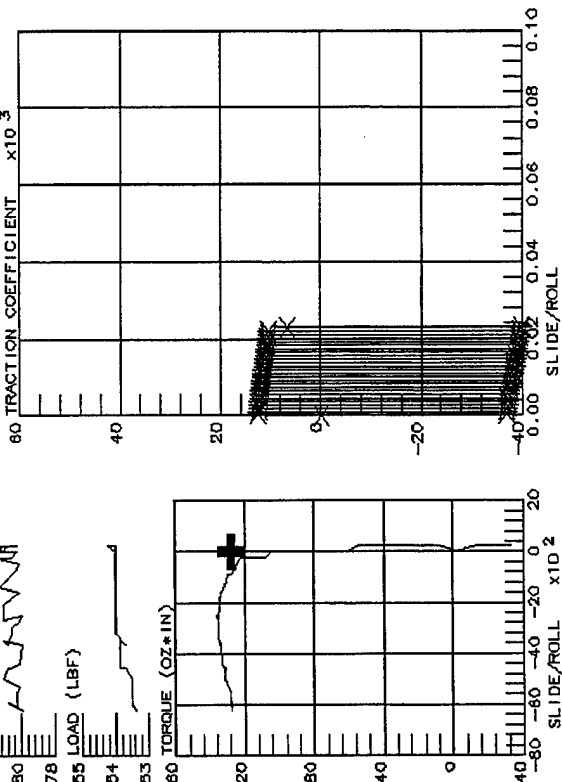
BO 81-288 ApiezonC+5%Bardhal(VacKote) #74
80F 19LBF 316RPM 1 FILE: 81-288b080

of Points Modified = 0

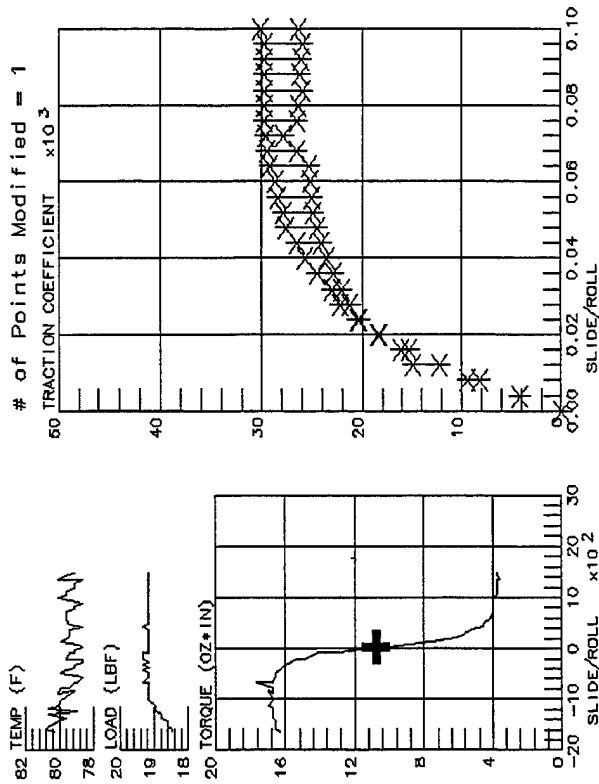


BO 81-288 ApiezonC+5%Bardhal(VacKote) #76
80F 154LBF 316RPM 3 FILE: 81-288b080

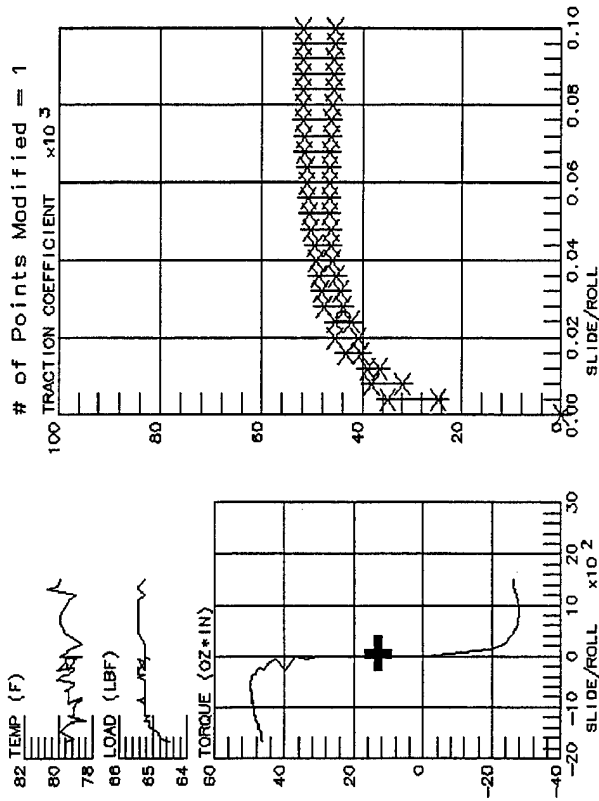
of Points Modified = 0



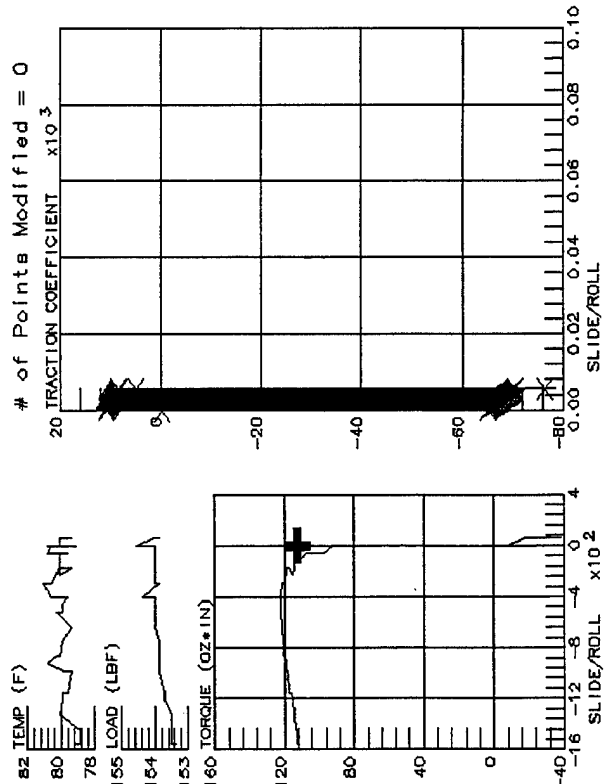
BO 81-288 ApiezonC+5%Bardhal(VacKote) #77
80F 19LBF 1273RPM 4 FILE: 81-288b080



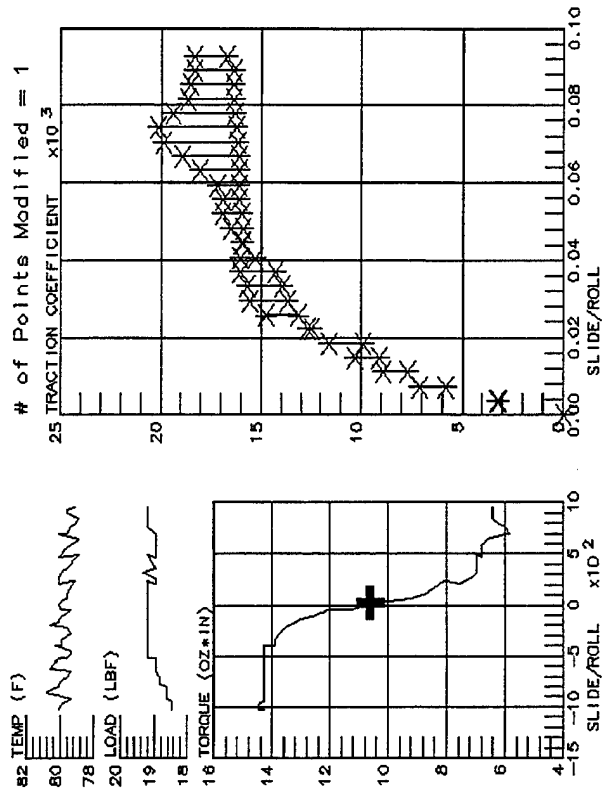
BO 81-288 ApiezonC+5%Bardhal(VacKote) #78
80F 65LBF 1273RPM 5 FILE: 81-288b080



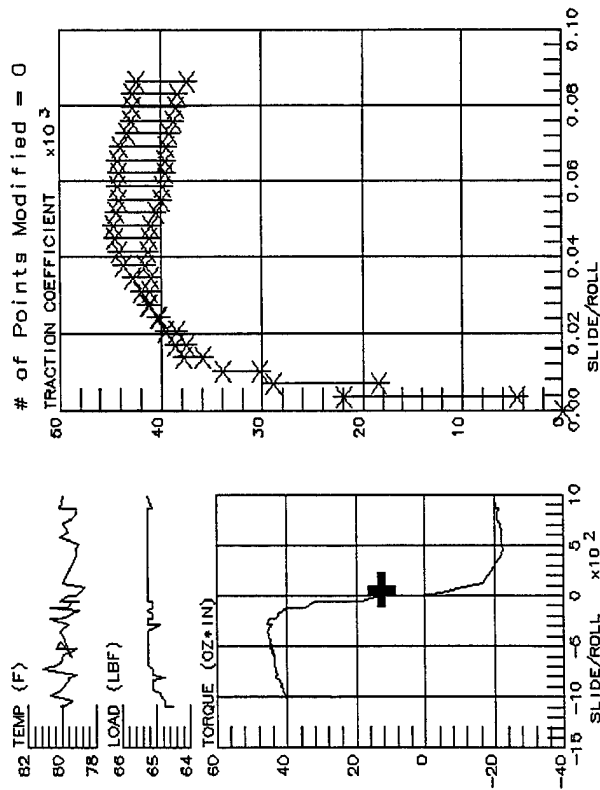
BO 81-288 ApiezonC+5%Bardhal(VacKote) #79
80F 154LBF 1273RPM 6 FILE: 81-288b080



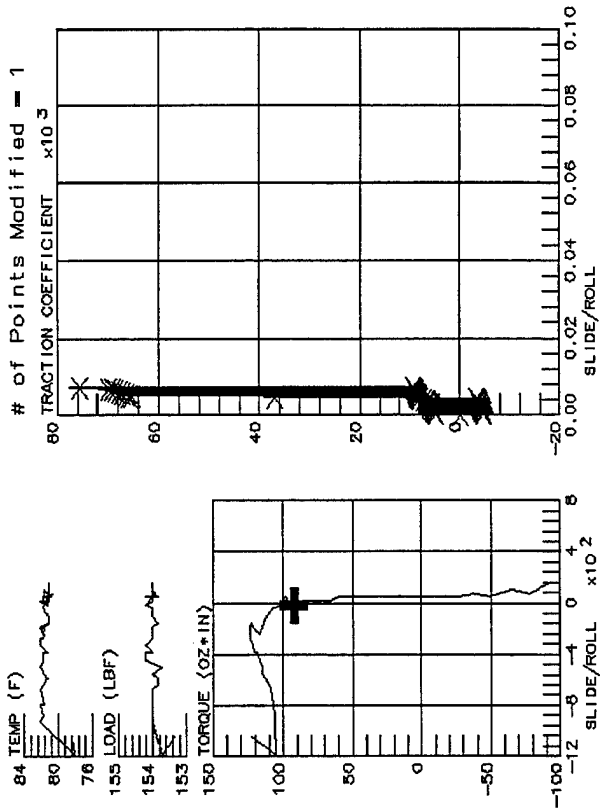
BO 81-288 ApiezonC+5%Bardhal(VacKote) #80
80F 19LBF 2546RPM 7 FILE: 81-288b080



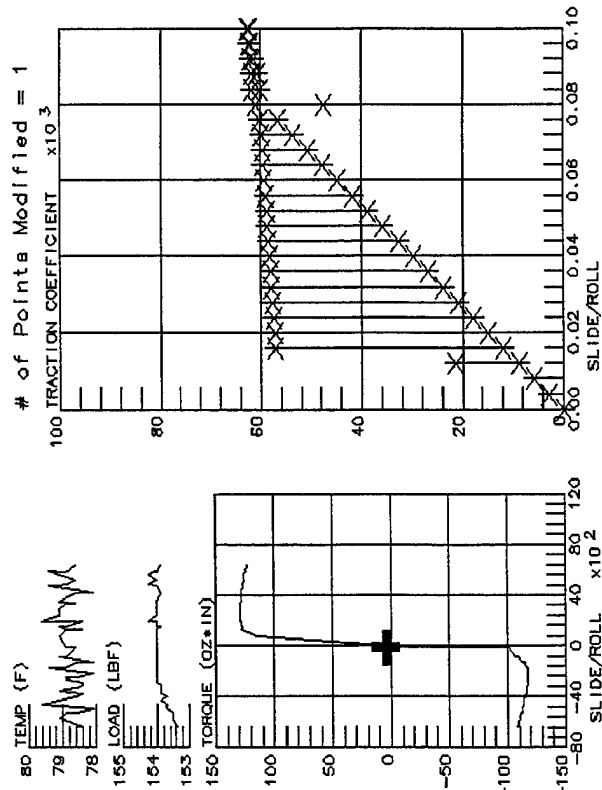
BO 81-288 ApiezonC+5%Bardhal(VacKote) #81
80F 66LBF 2646RPM 8 FILE: 81-288bo80



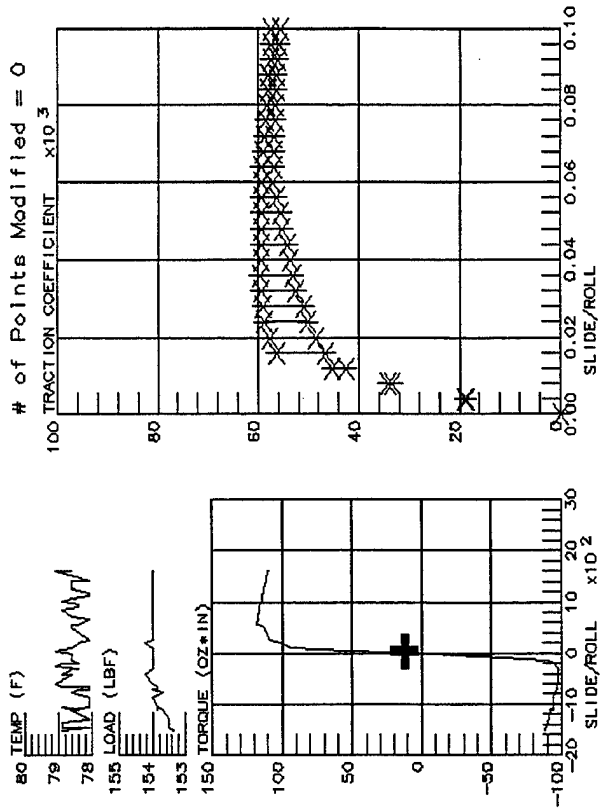
BO 81-288 ApiezonC+5%Bardhal(VacKote) #82
80F 154LBF 2646RPM 9 FILE: 81-288bo80



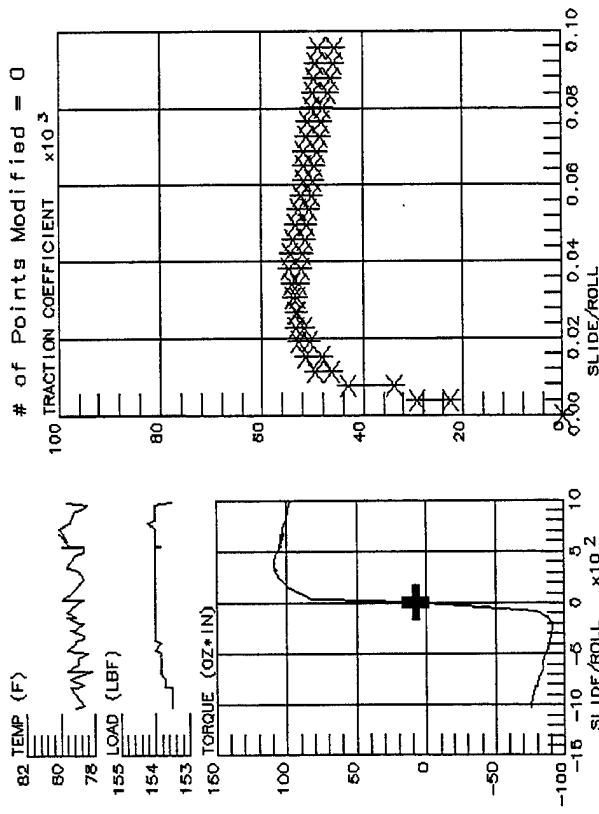
BO 81-288 ApiezonC+5%Bardhal(VacKote) #83
80F 154LBF 316RPM 1 FILE: 81-288bo80



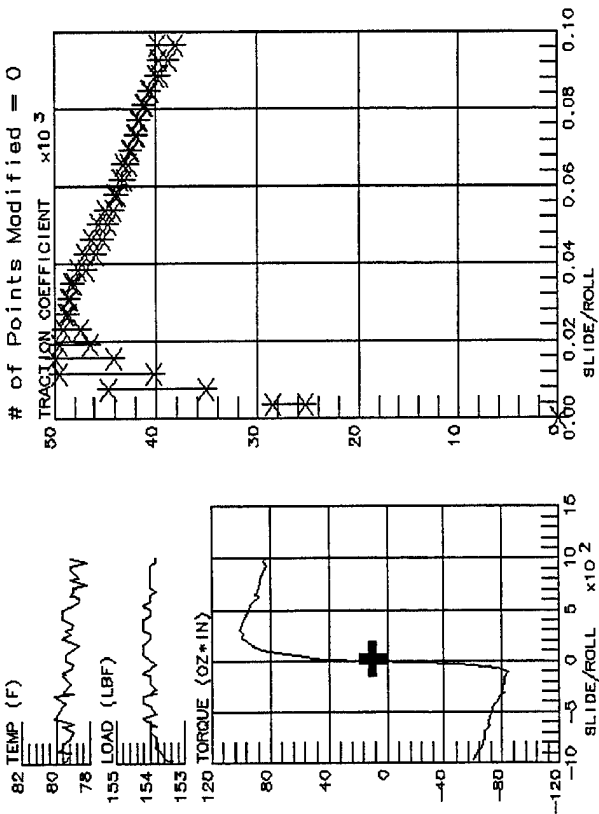
BO 81-288 ApiezonC+5%Bardhal(VacKote) #84
80F 154LBF 1273RPM 2 FILE: 81-288bo80



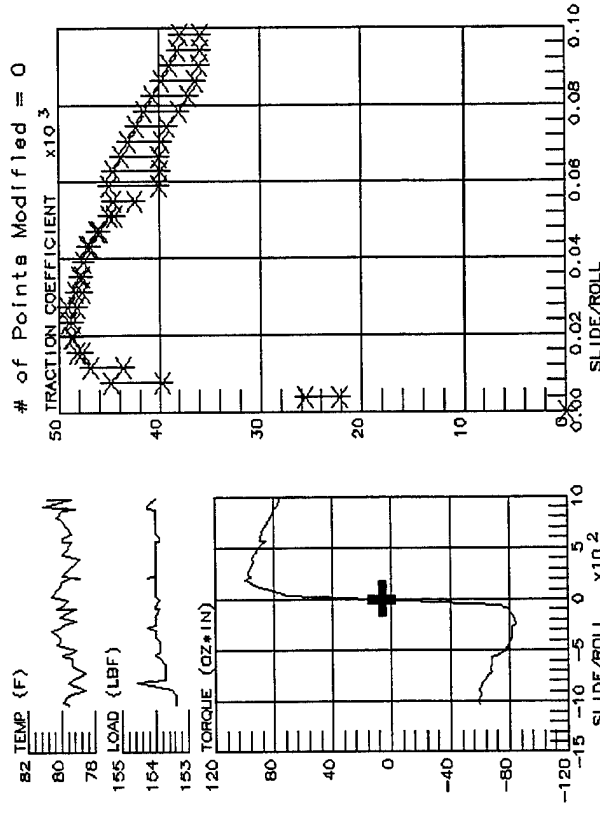
BO 81-288 ApiezonC+5%Bardhal(VacKote) #85
80F 154LBF 2546RPM 3 FILE: 81-288bo80



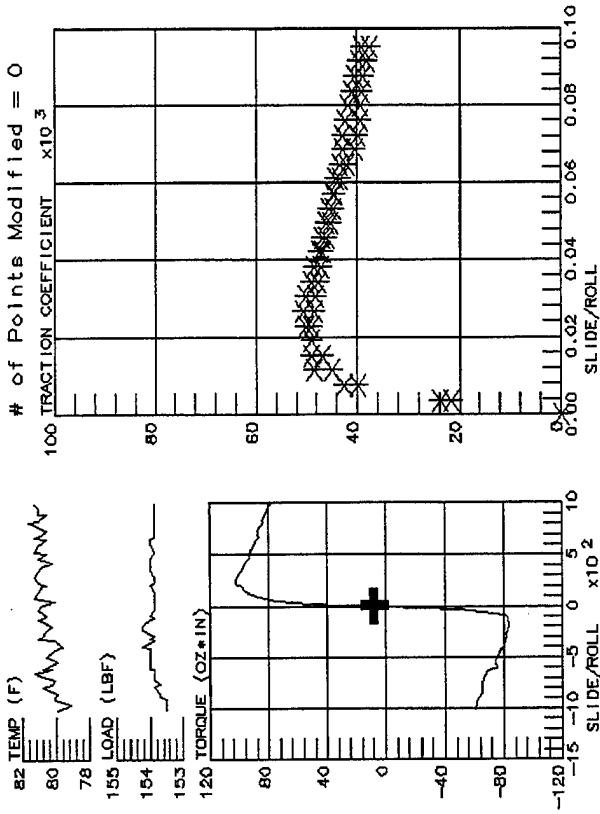
BO 81-288 ApiezonC+5%Bardhal(VacKote) #86
80F 154LBF 5093RPM 4 FILE: 81-288bo80



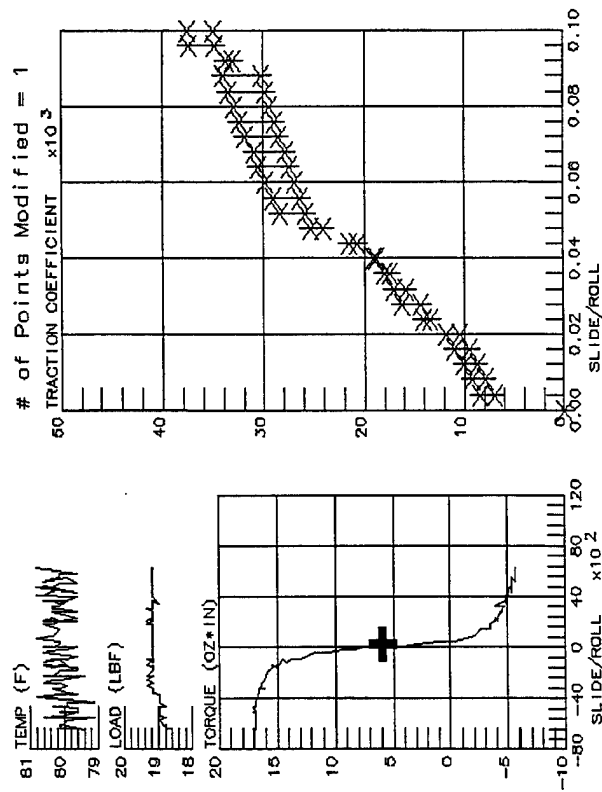
BO 81-288 ApiezonC+5%Bardhal(VacKote) #87
80F 154LBF 7639RPM 5 FILE: 81-288bo80



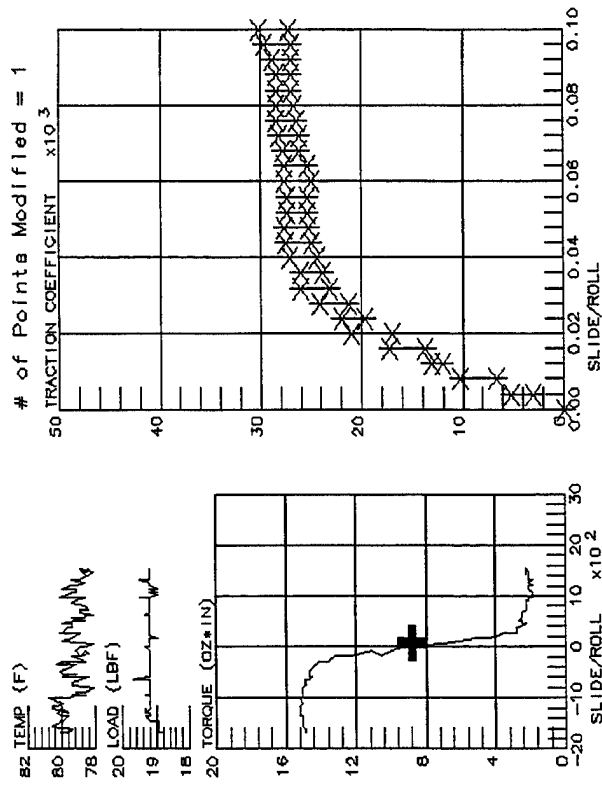
BO 81-288 ApiezonC+5%Bardhal(VacKote) #88
80F 154LBF 10186RPM 6 FILE: 81-288bo80



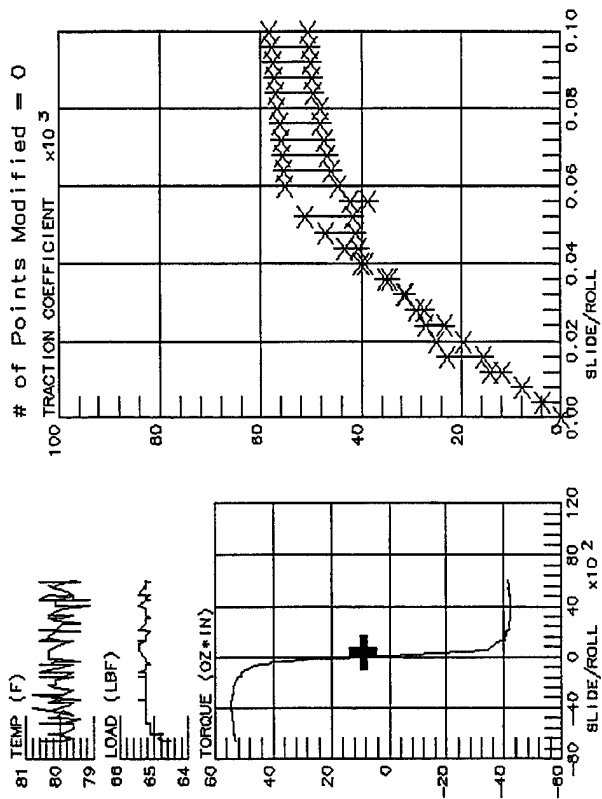
BO 81-288 ApiezonC+5%Bardhal(VacKote) #89
80F 19LBF 318RPM 1 FILE: 81-288b080



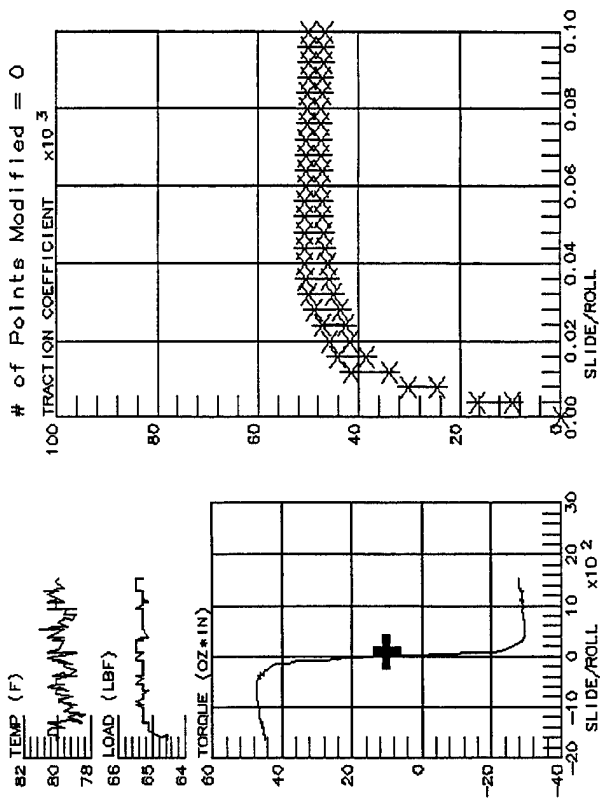
BO 81-288 ApiezonC+5%Bardhal(VacKote) #91
80F 19LBF 1273RPM 3 FILE: 81-288b080



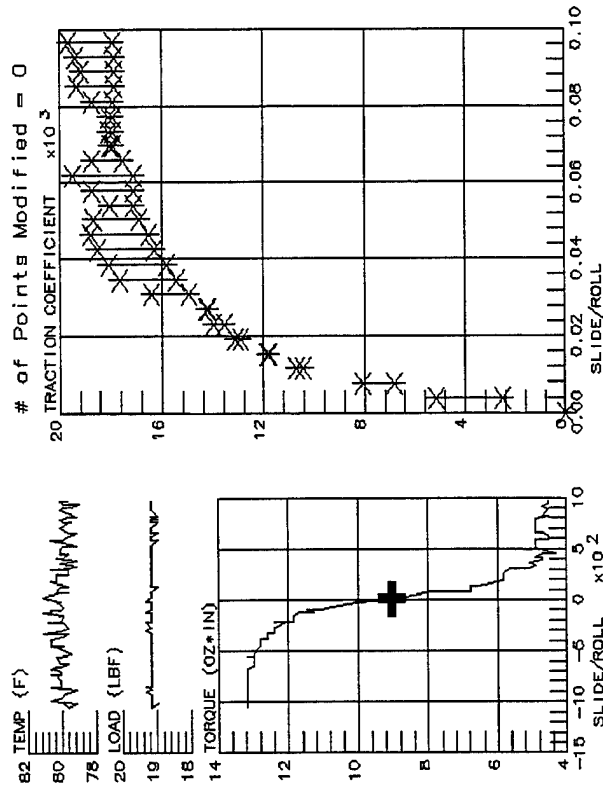
BO 81-288 ApiezonC+5%Bardhal(VacKote) #90
80F 65LBF 318RPM 2 FILE: 81-288b080



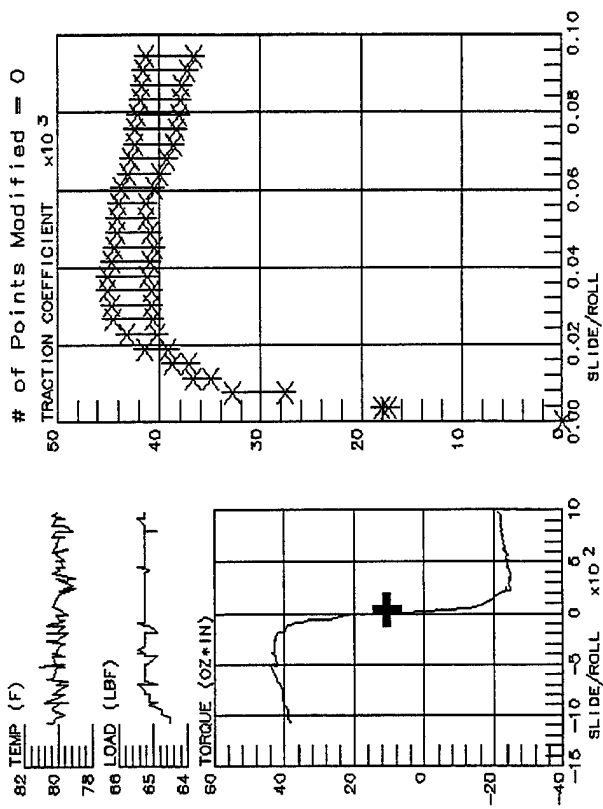
BO 81-288 ApiezonC+5%Bardhal(VacKote) #92
80F 85LBF 1273RPM 4 FILE: 81-288b080



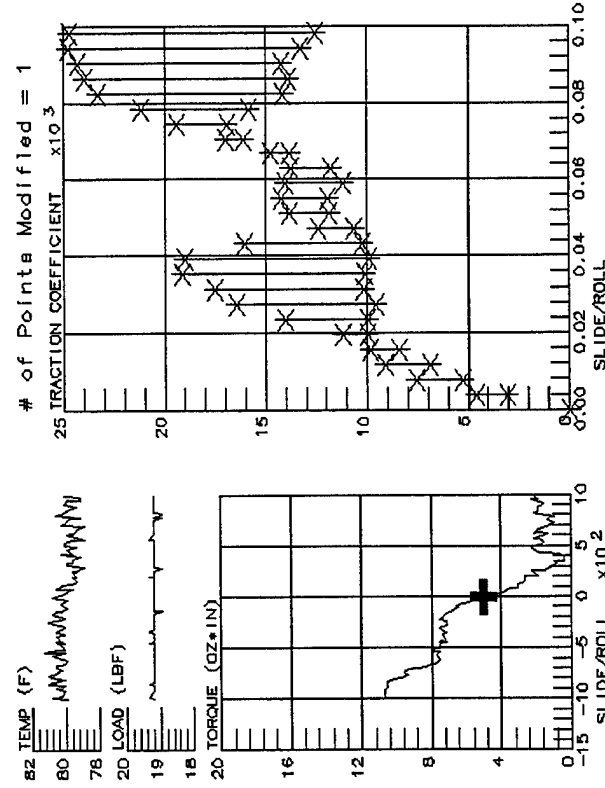
BO 81-288 ApiezonC+5%Bardhal(VacKote) #93
80F 19LBF 2546RPM 5 FILE: 81-288b080



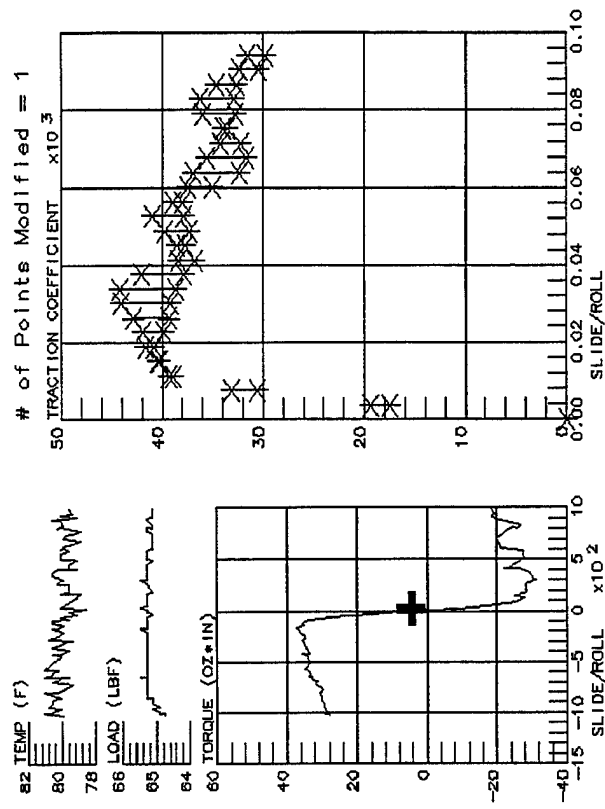
BO 81-288 ApiezonC+5%Bardhal(VacKote) #94
80F 65LBF 2546RPM 8 FILE: 81-288b080



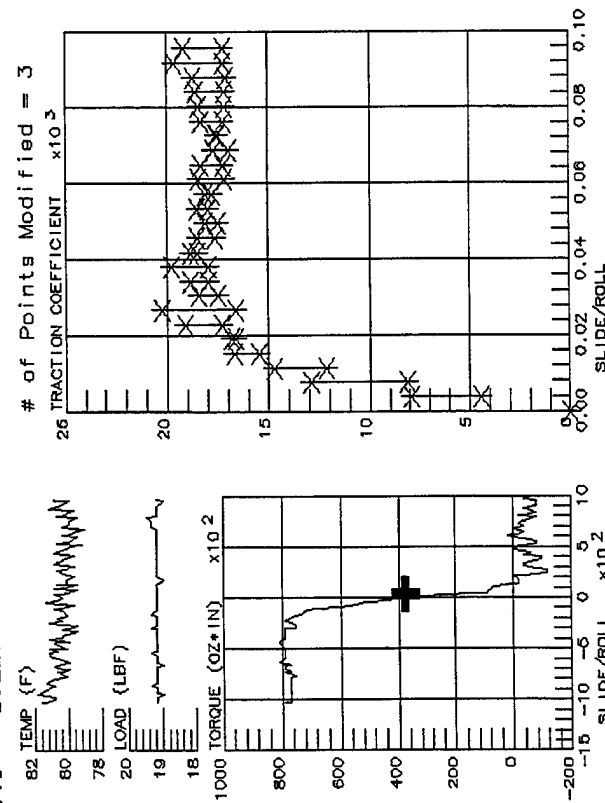
BO 81-288 ApiezonC+5%Bardhal(VacKote) #95
80F 19LBF 5093RPM 7 FILE: 81-288b080



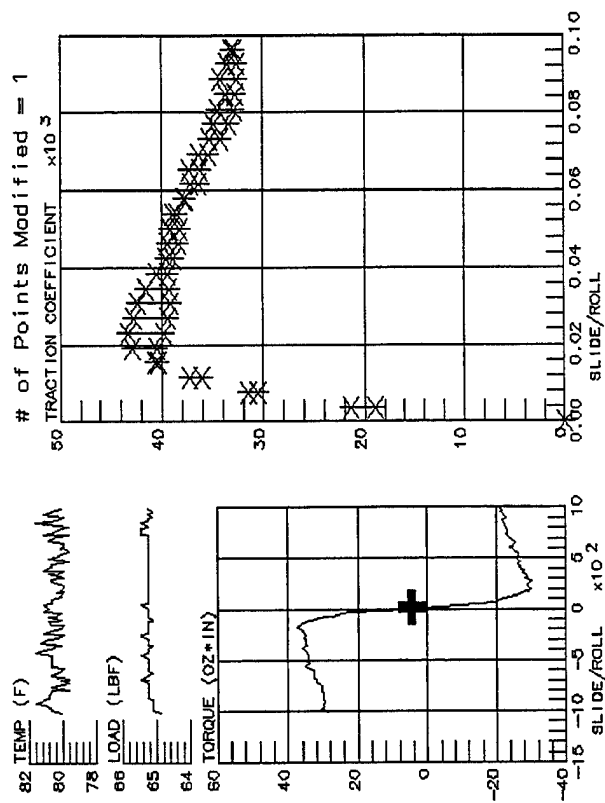
BO 81-288 ApiezonC+5%Bardhal(VacKote) #96
80F 65LBF 5093RPM 8 FILE: 81-288b080



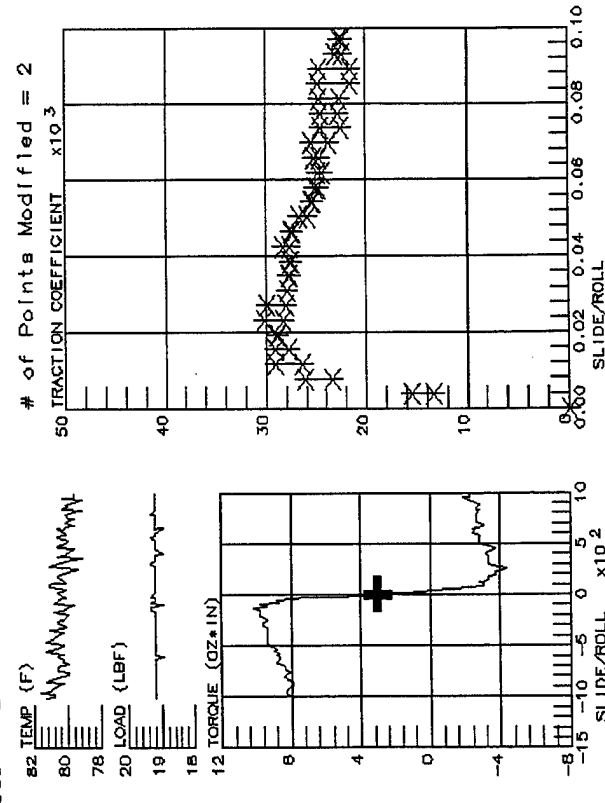
BO 81-288 ApiezonC+5%Bardhal(VacKote) #97
80F 19LBF 7639RPM 9 FILE: 81-288bo80



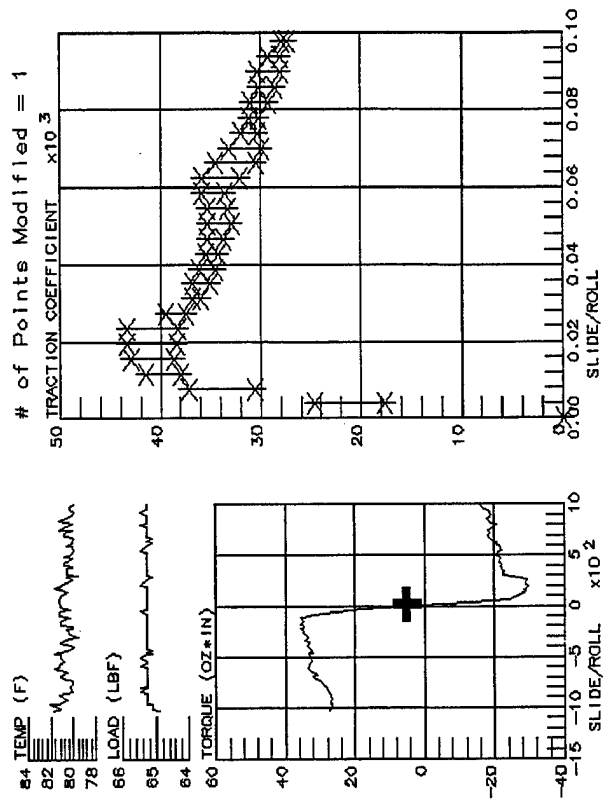
BO 81-288 ApiezonC+5%Bardhal(VacKote) #98
80F 65LBF 7639RPM 10 FILE: 81-288bo80



BO 81-288 ApiezonC+5%Bardhal(VacKote) #99
80F 19LBF 10186RPM 11 FILE: 81-288bo80

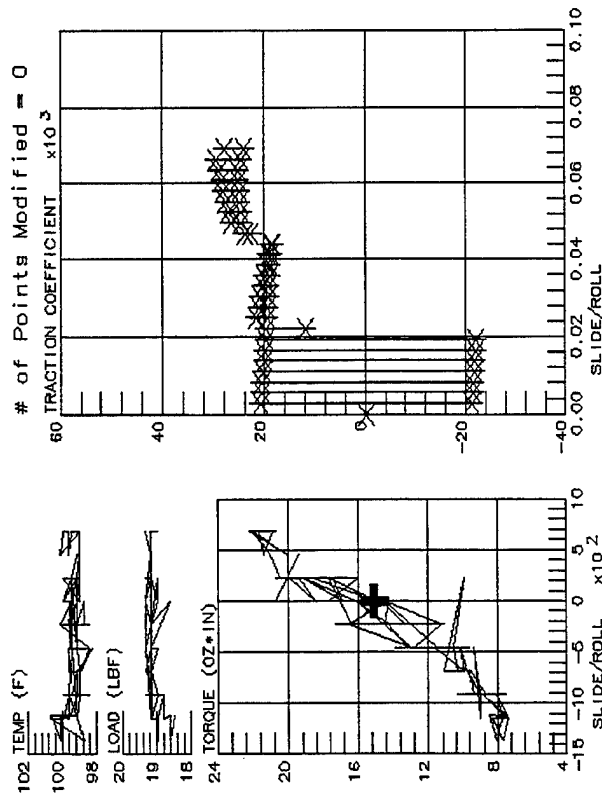


BO 81-288 ApiezonC+5%Bardhal(VacKote) #100
80F 65LBF 10186RPM 12 FILE: 81-288bo80

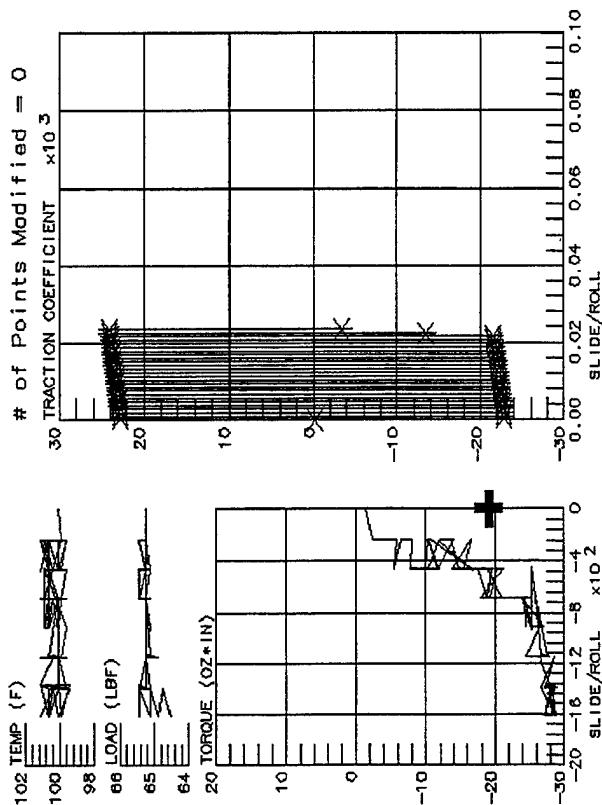


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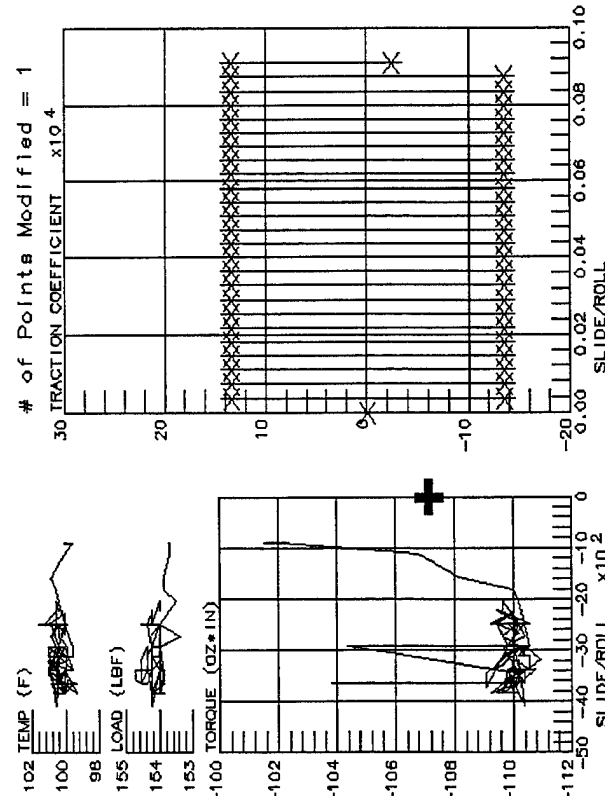
BO 81-288 AplezonC+5%Bardhal (VacKote) #101
100F 19LBF 318RPM 1 FILE: 81-288b0100



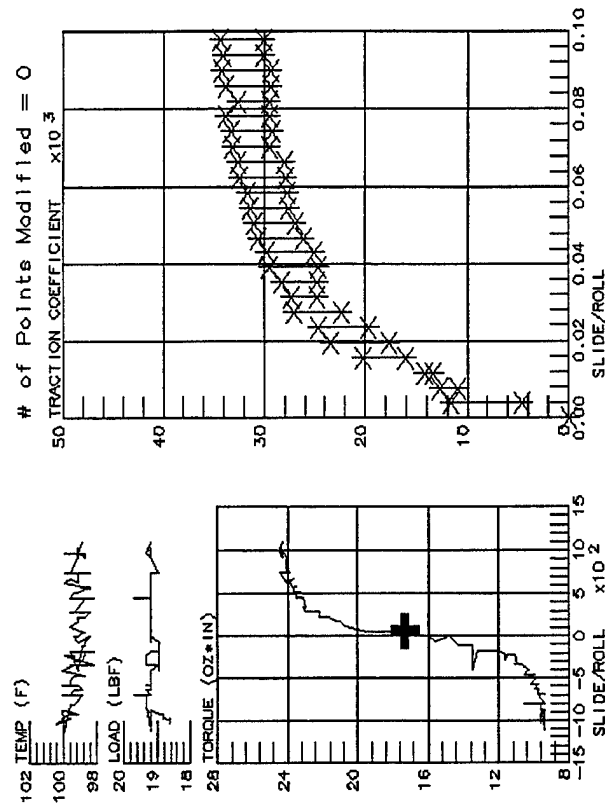
BO 81-288 AplezonC+5%Bardhal(Vackote) #102
100F 65LBF 318RPM 2 FILE: 81-288b0100



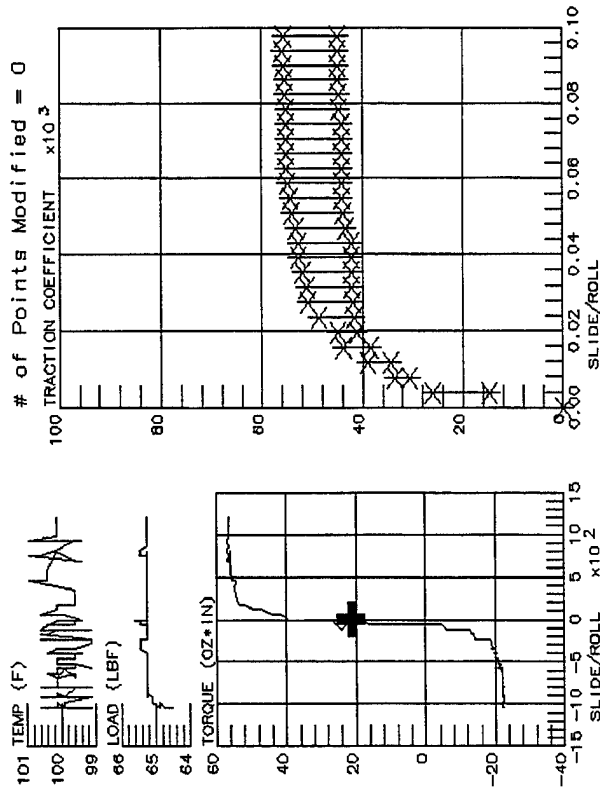
BO 81-288 ApiezonC+5%Bardhal (VacKote) #103
100F 154LBF 318RPM 3 FILE: 81-288b0100



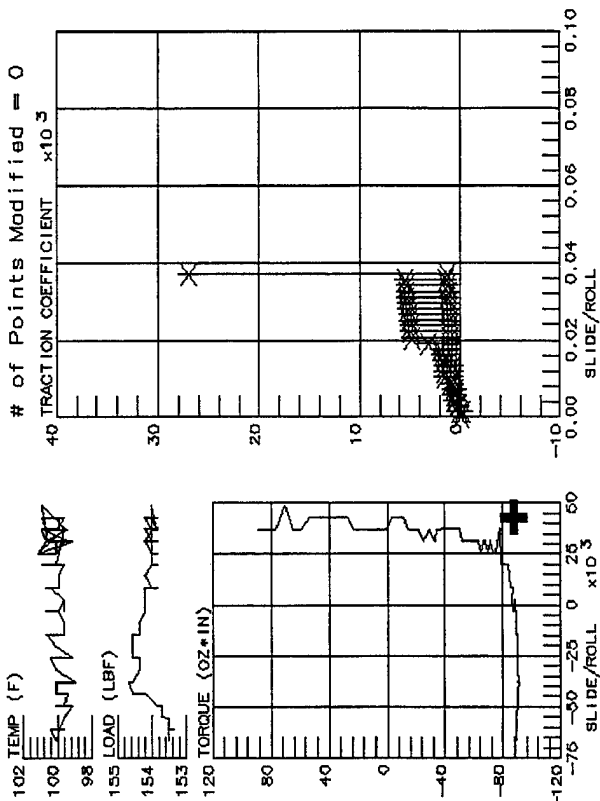
BO 81-288 ApiezonC+5%Bardhal (VacKote) #104
1100F 19LBF 1273RPM 4 FILE: 81-288bo100



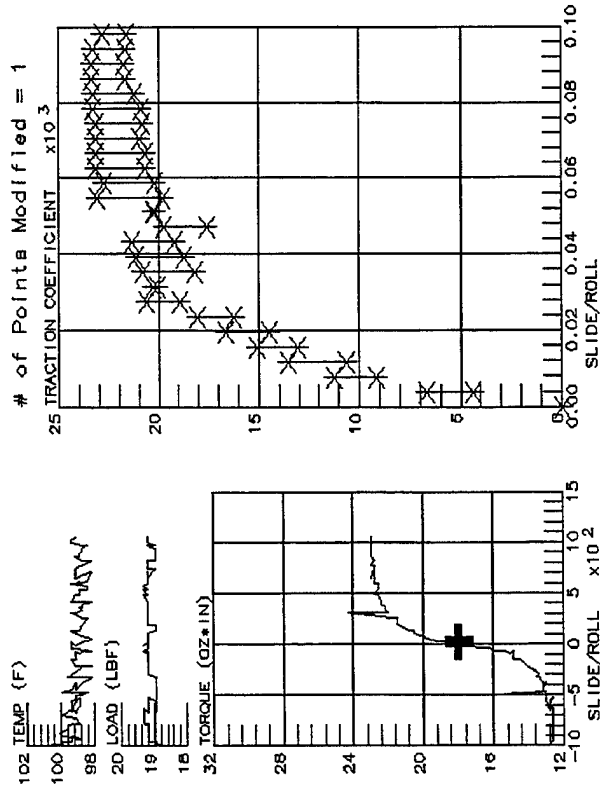
BO 81-288 ApiezonC+5%Bardhal(VacKote) #105
100F 65LBF 1273RPM 5 FILE: 81-288b0100



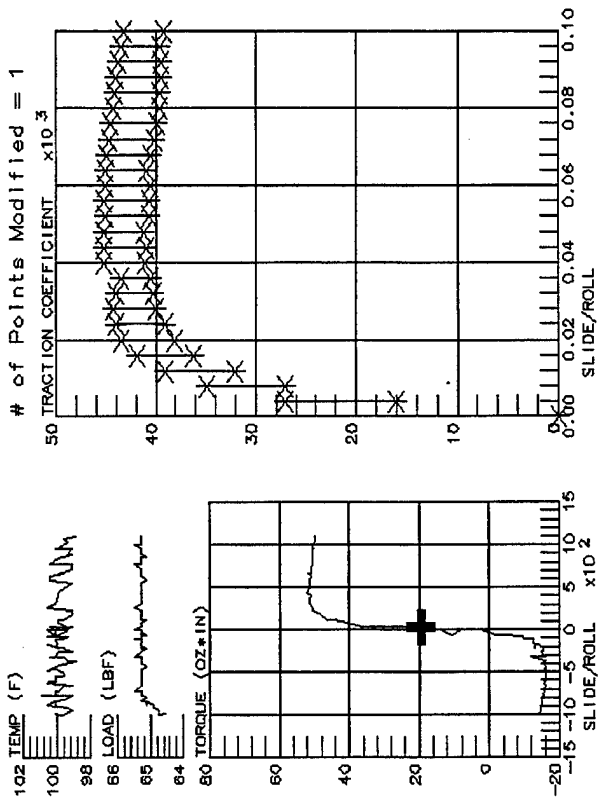
BO 81-288 ApiezonC+5%Bardhal(VacKote) #108
100F 164LBF 1273RPM 6 FILE: 81-288b0100



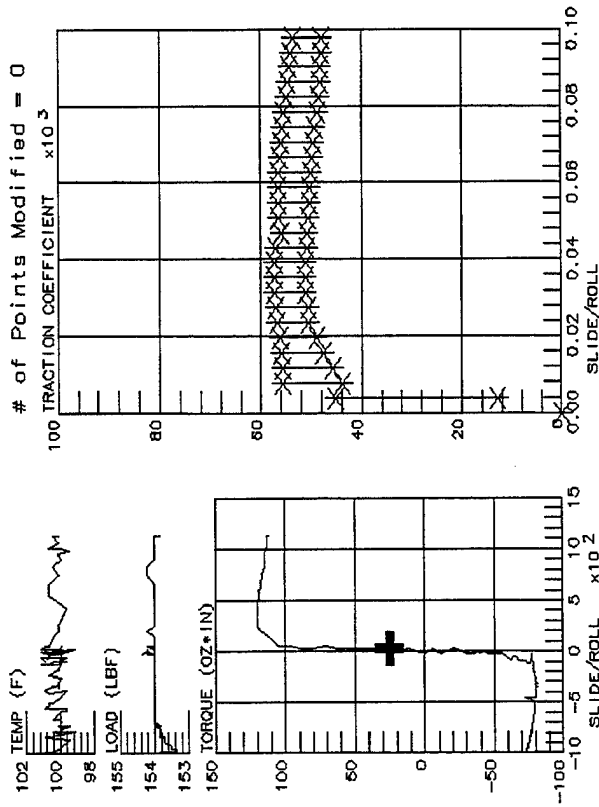
BO 81-288 ApiezonC+5%Bardhal(VacKote) #107
100F 19LBF 2546RPM 7 FILE: 81-288b0100



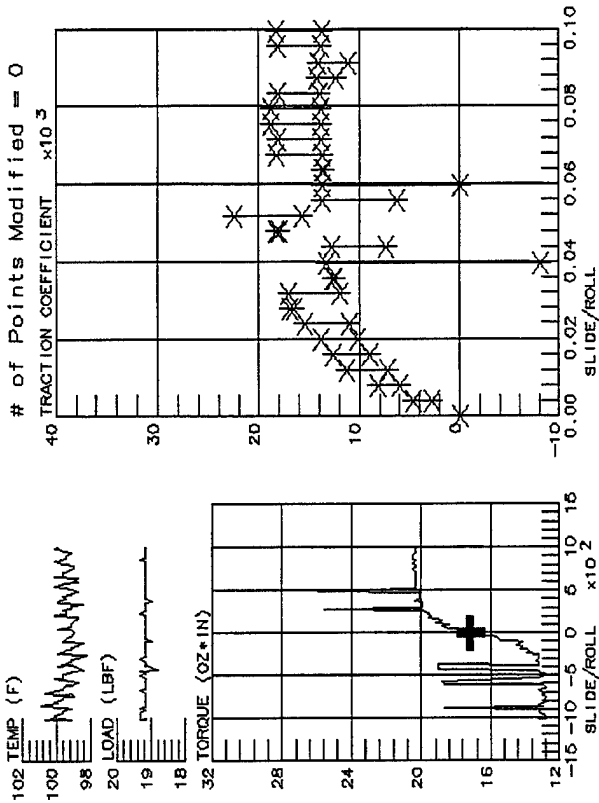
BO 81-288 ApiezonC+5%Bardhal(VacKote) #108
100F 65LBF 2546RPM 8 FILE: 81-288b0100



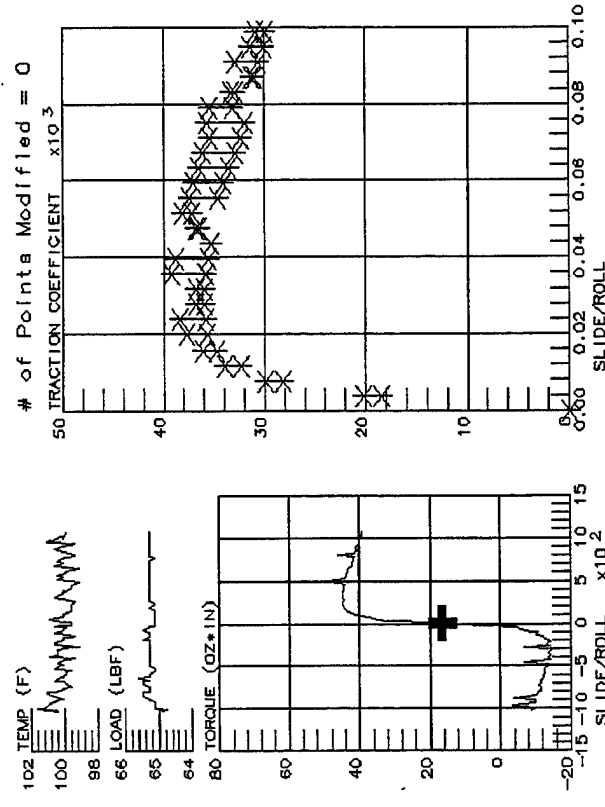
BO 81-288 ApiezonC+5%Bardhal(VacKote) #109
100F 154LBF 264RPM 9 FILE: 81-288b0100



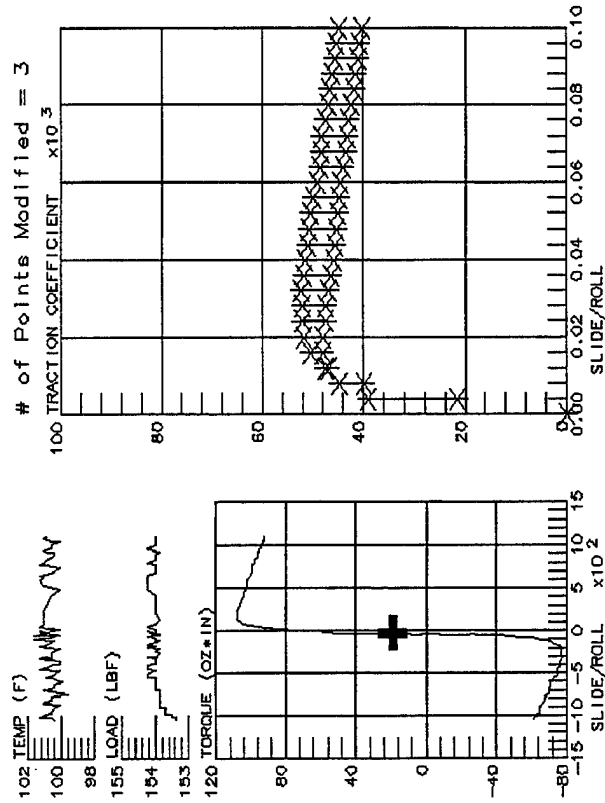
BO 81-288 ApiezonC+5%Bardhal(VacKote) #110
100F 19LBF 5093RPM 10 FILE: 81-288b0100



BO 81-288 ApiezonC+5%Bardhal(VacKote) #111
100F 65LBF 5093RPM 11 FILE: 81-288b0100

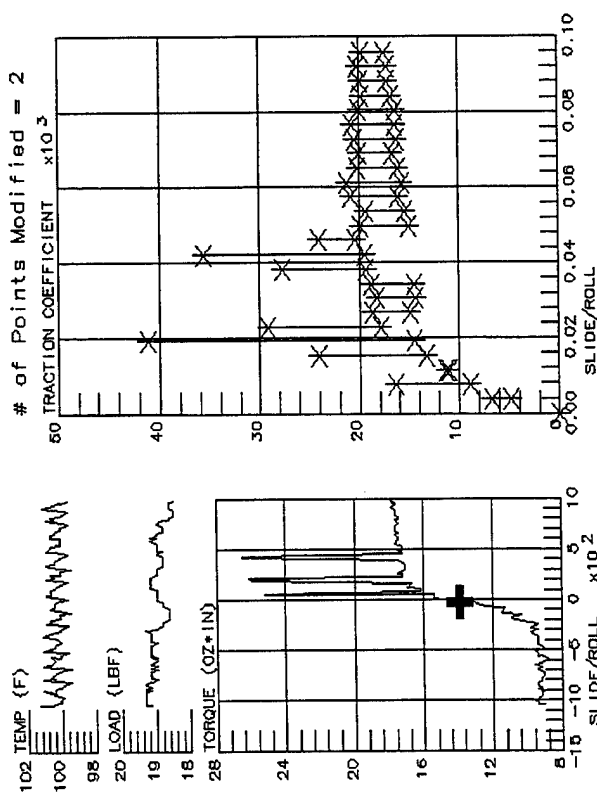


BO 81-288 ApiezonC+5%Bardhal(VacKote) #112
100F 154LBF 5093RPM 12 FILE: 81-288b0100



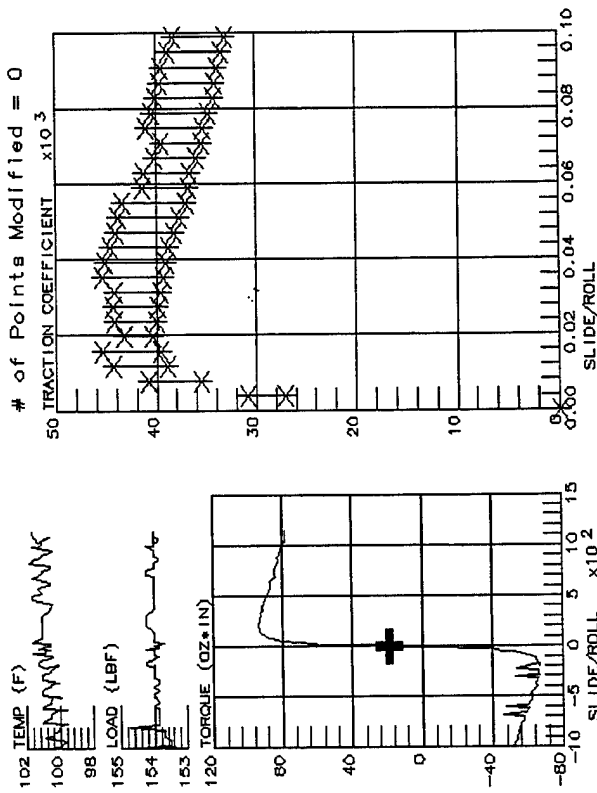
BO 81-288 ApiezonC+5%Bardhal(VacKote) #113
100F 19LBF 7639RPM 13 FILE: 81-288b0100

of Points Modified = 2



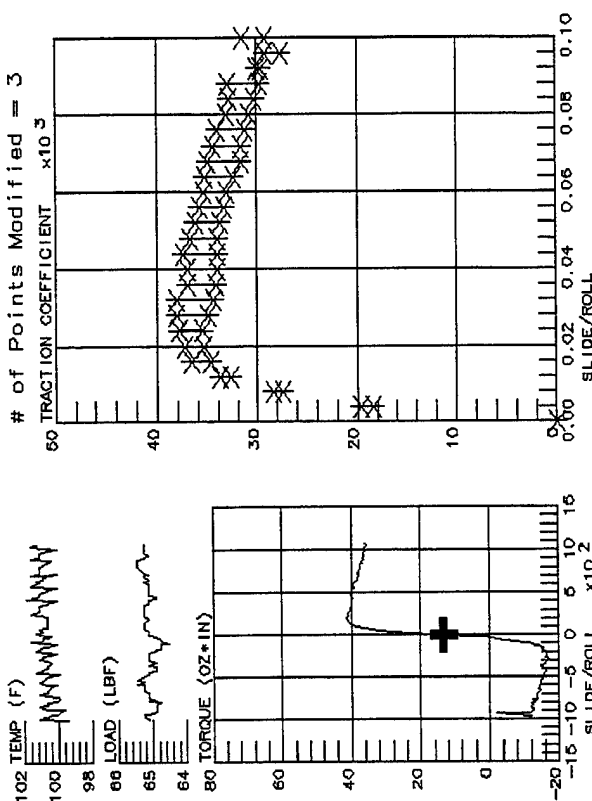
BO 81-288 ApiezonC+5%Bardhal(VacKote) #115
100F 154LBF 7639RPM 15 FILE: 81-288b0100

of Points Modified = 0



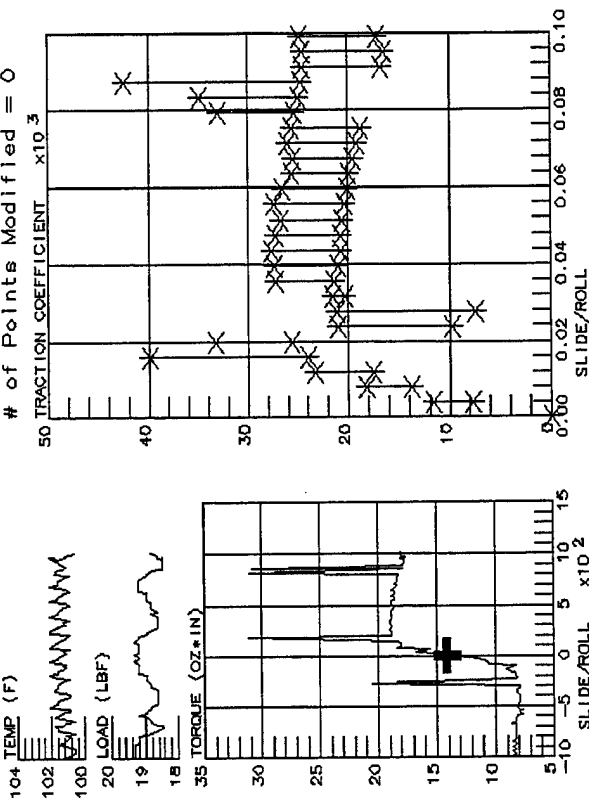
BO 81-288 ApiezonC+5%Bardhal(VacKote) #114
100F 65LBF 7639RPM 14 FILE: 81-288b0100

of Points Modified = 3



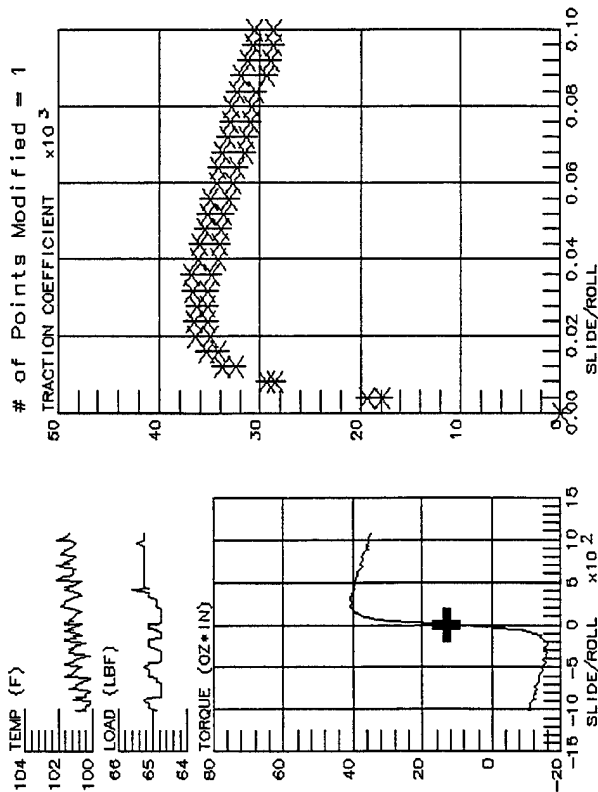
BO 81-288 ApiezonC+5%Bardhal(VacKote) #116
100F 19LBF 10186RPM 16 FILE: 81-288b0100

of Points Modified = 0



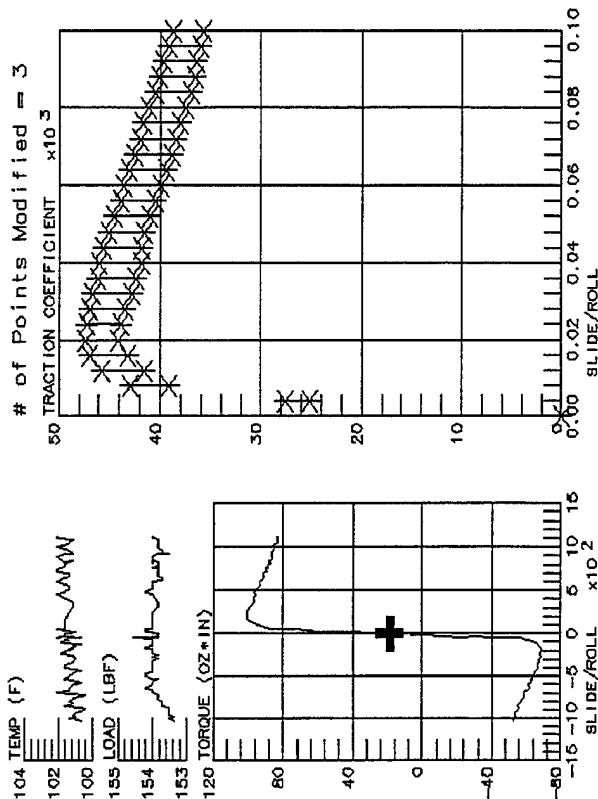
BO 81-288 ApiezonC+5%Bardhal(VacKote) #117
100F 65LBF 1018RPM 17 FILE: 81-288b0100

of Points Modified = 1



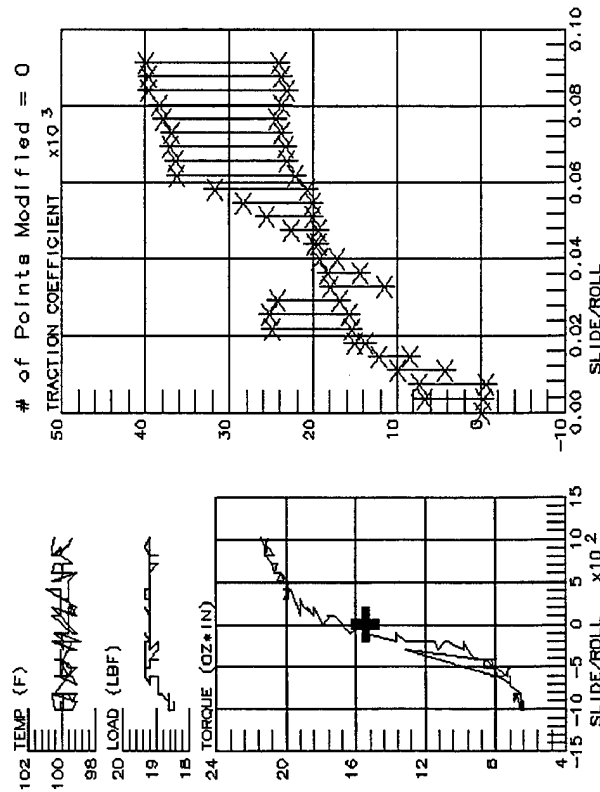
BO 81-288 ApiezonC+5%Bardhal(VacKote) #118
100F 154LBF 1018RPM 18 FILE: 81-288b0100

of Points Modified = 3



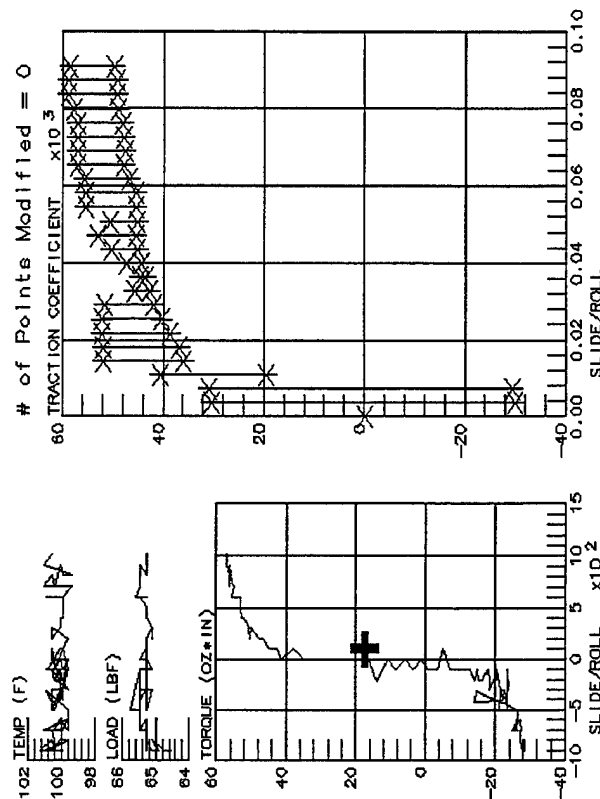
BO 81-288 ApiezonC+5%Bardhal(VacKote) #119
100F 19LBF 318RPM 1 FILE: 81-288b0100

of Points Modified = 0

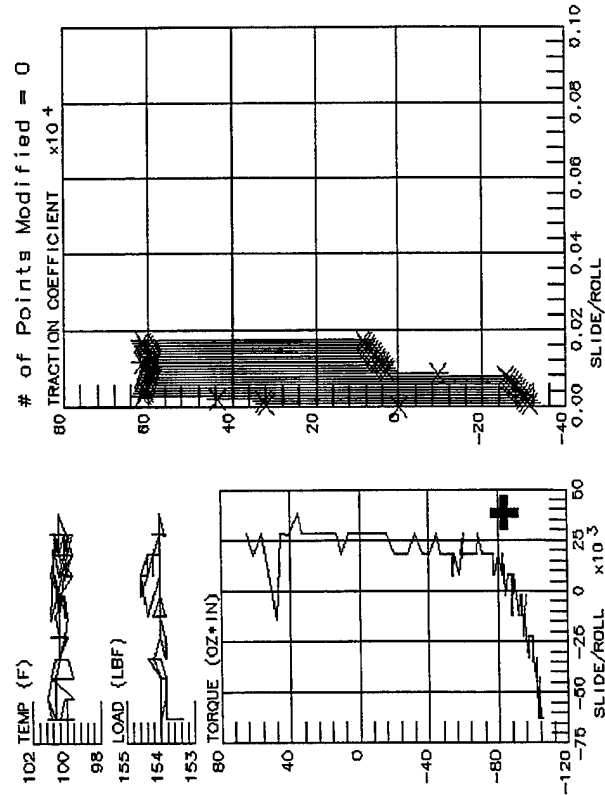


BO 81-288 ApiezonC+5%Bardhal(VacKote) #120
100F 65LBF 318RPM 2 FILE: 81-288b0100

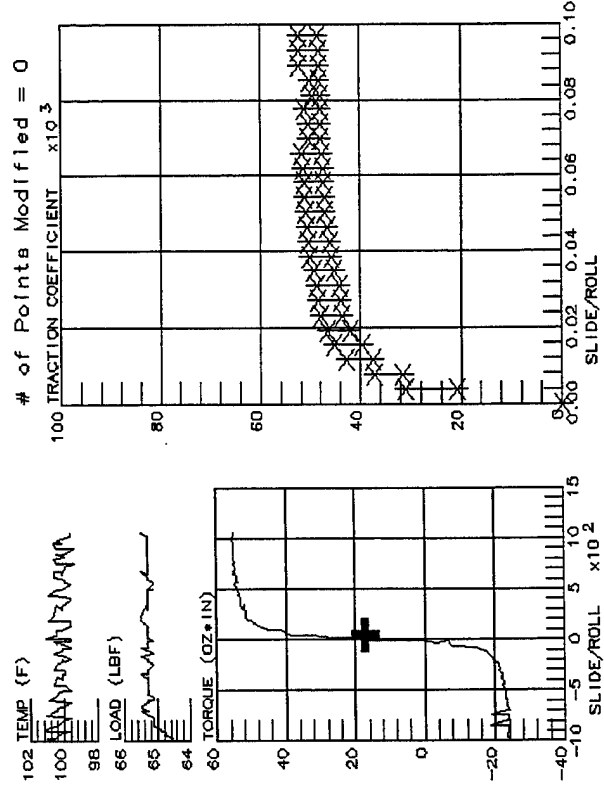
of Points Modified = 0



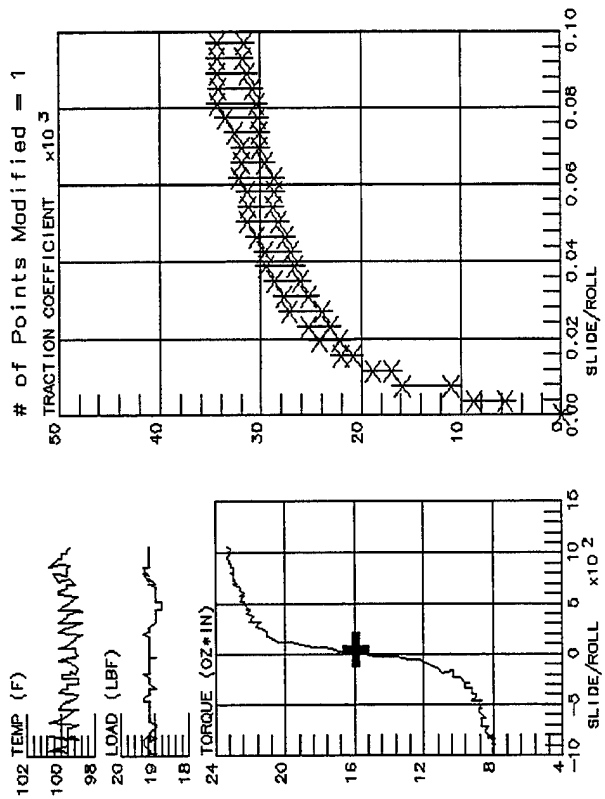
BO 81-288 ApiezonC+5%Bardhal(VacKote) #121
100F 154LBF 318RPM 3 FILE: 81-288b0100



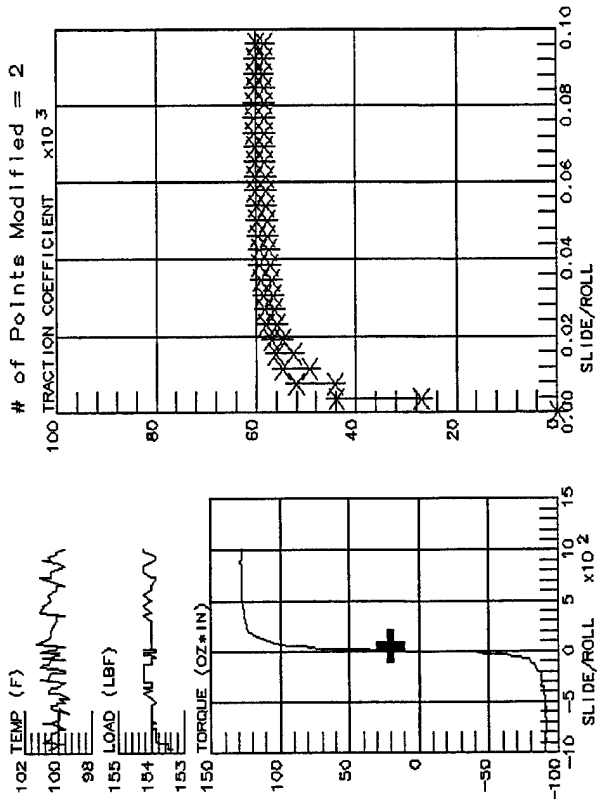
BO 81-288 ApiezonC+5%Bardhal(VacKote) #123
100F 65LBF 1273RPM 5 FILE: 81-288b0100



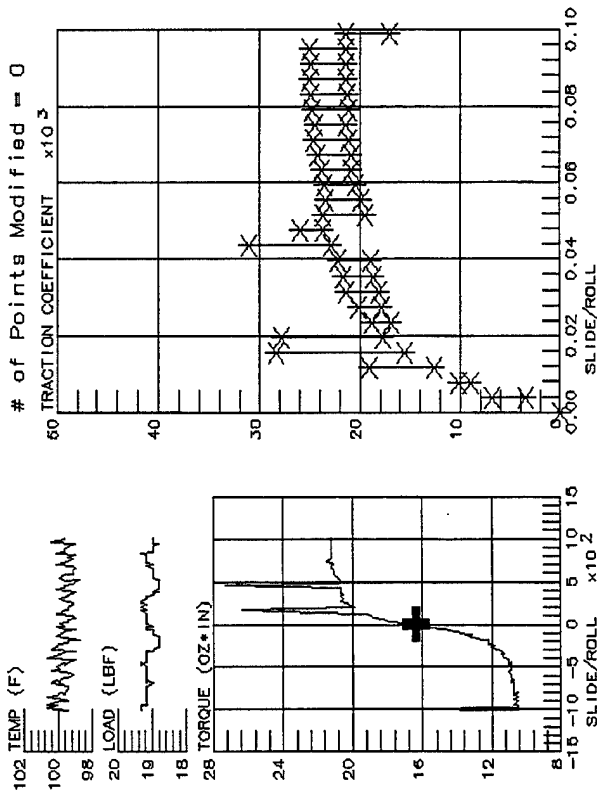
BO 81-288 ApiezonC+5%Bardhal(VacKote) #122
100F 19LBF 1273RPM 4 FILE: 81-288b0100



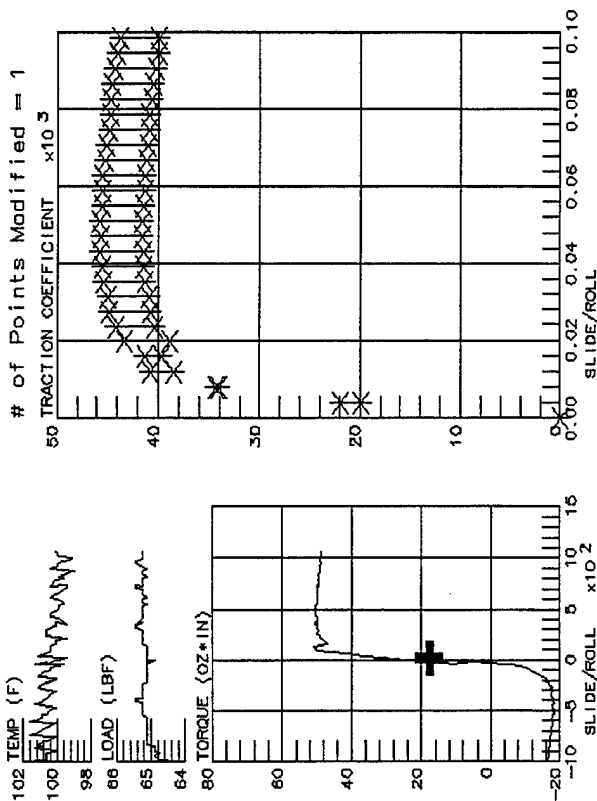
BO 81-288 ApiezonC+5%Bardhal(VacKote) #124
100F 154LBF 1273RPM 6 FILE: 81-288b0100



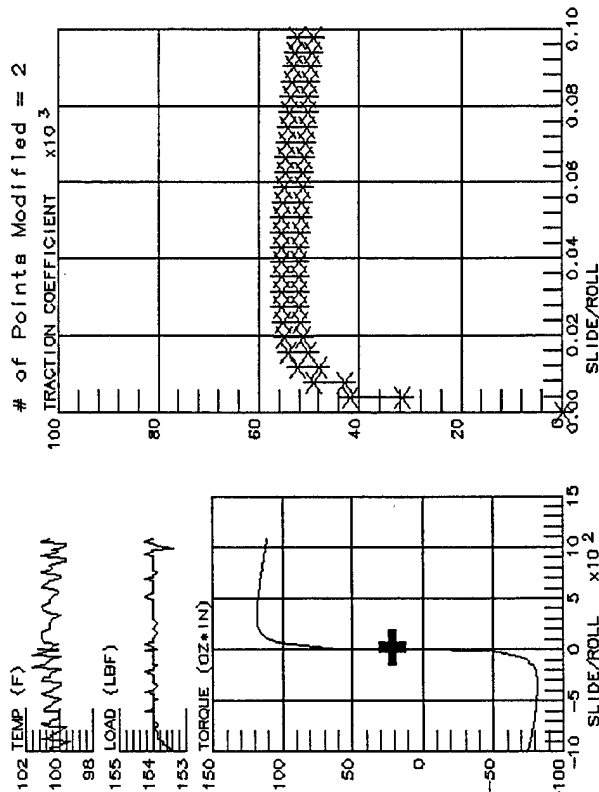
BO 81-288 ApiezonC+5%Bardhal(VacKote) #125
100F 19LBF 2546RPM 7 FILE: 81-288b0100



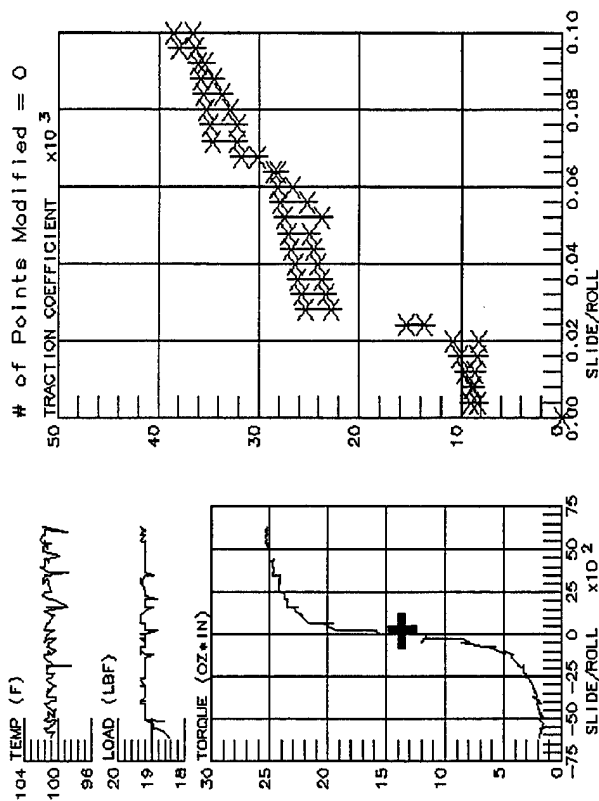
BO 81-288 ApiezonC+5%Bardhal(VacKote) #128
100F 65LBF 2546RPM 8 FILE: 81-288b0100



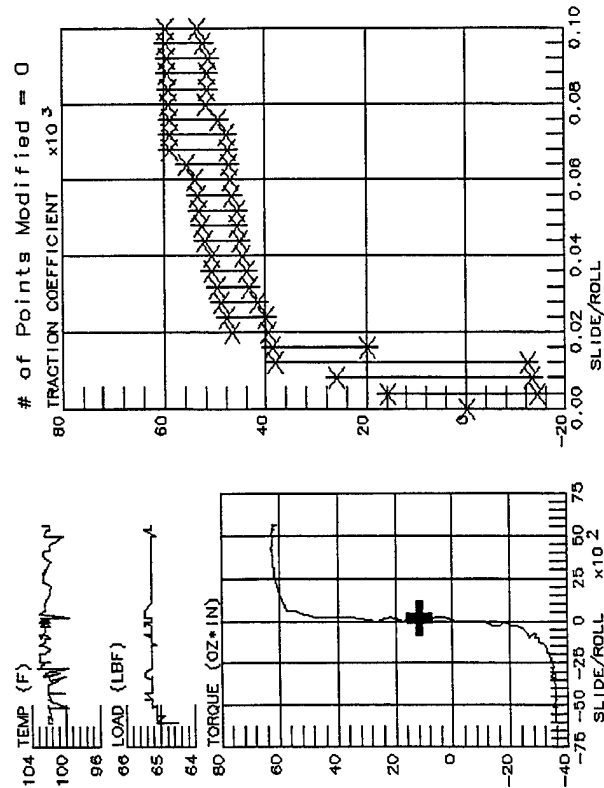
BO 81-288 ApiezonC+5%Bardhal(VacKote) #127
100F 154LBF 2546RPM 9 FILE: 81-288b0100



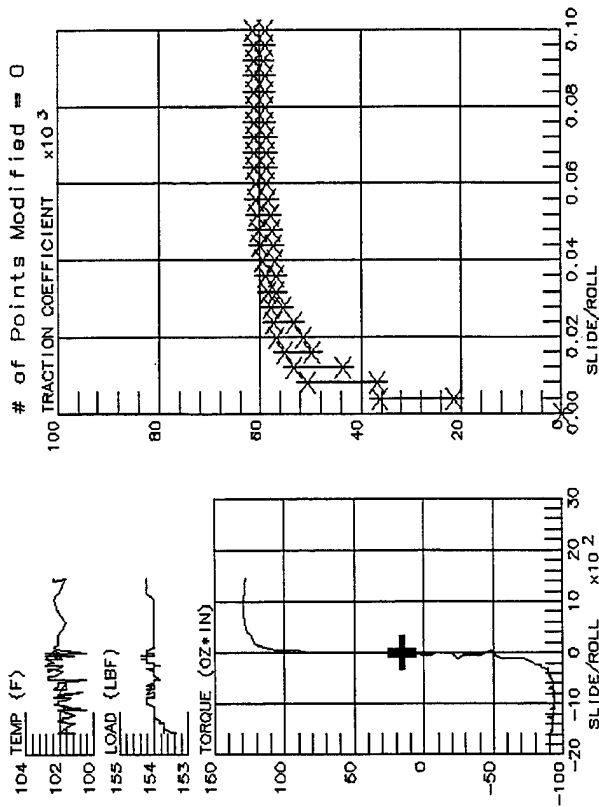
BO 81-288 ApiezonC+5%Bardhal(VacKote) #128
100F 19LBF 318RPM 1 FILE: 81-288b0100



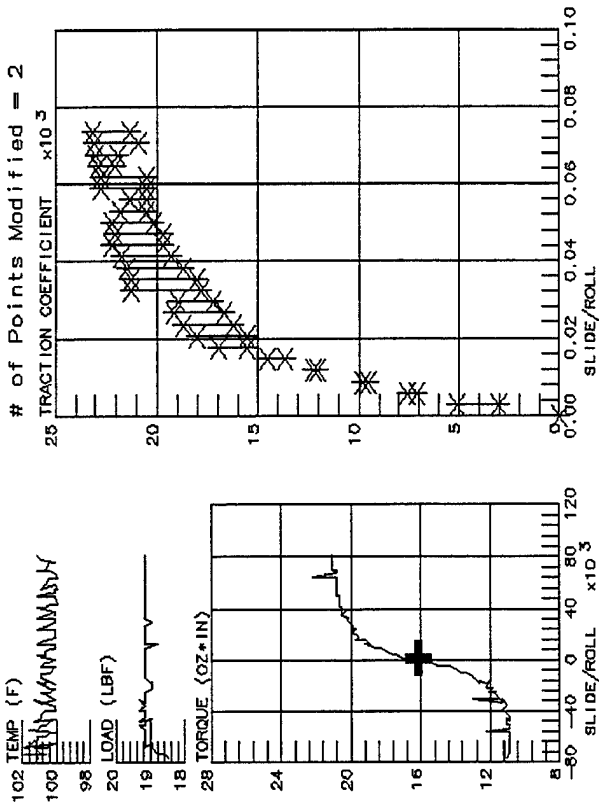
BO 81-288 ApiezonC+5%Bardhal(VacKote) #129
100F 65LBF 318RPM 2 FILE: 81-288b0100



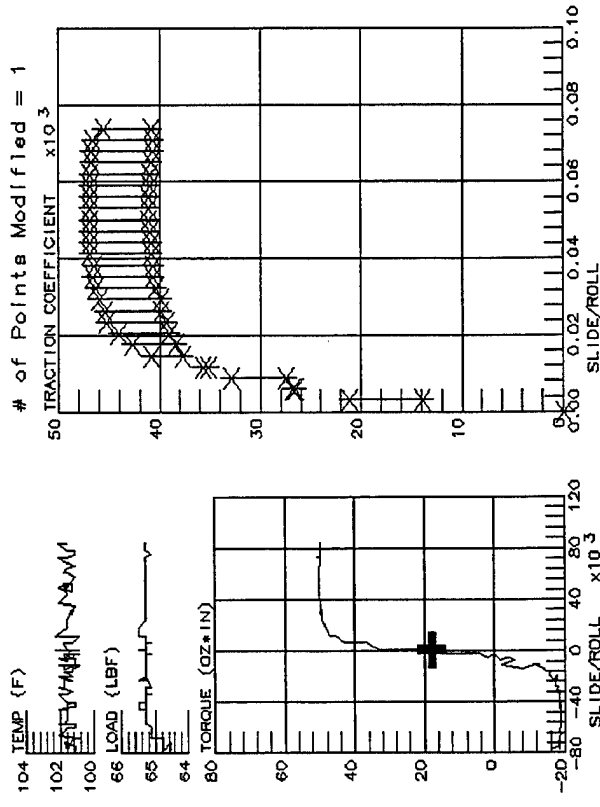
BO 81-288 ApiezonC+5%Bardhal(VacKote) #133
100F 154LBF 1273RPM 6 FILE: 81-288b0100



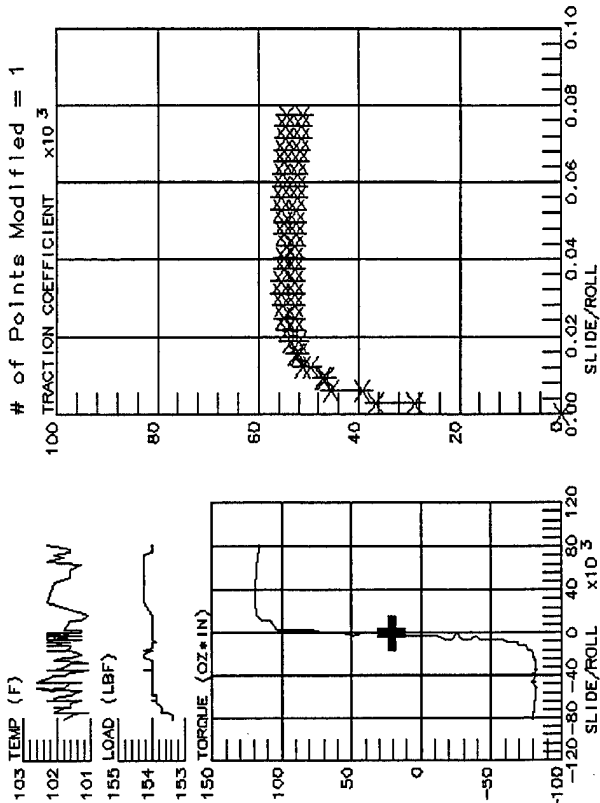
BO 81-288 ApiezonC+5%Bardhal(VacKote) #134
100F 19LBF 2546RPM 7 FILE: 81-288b0100



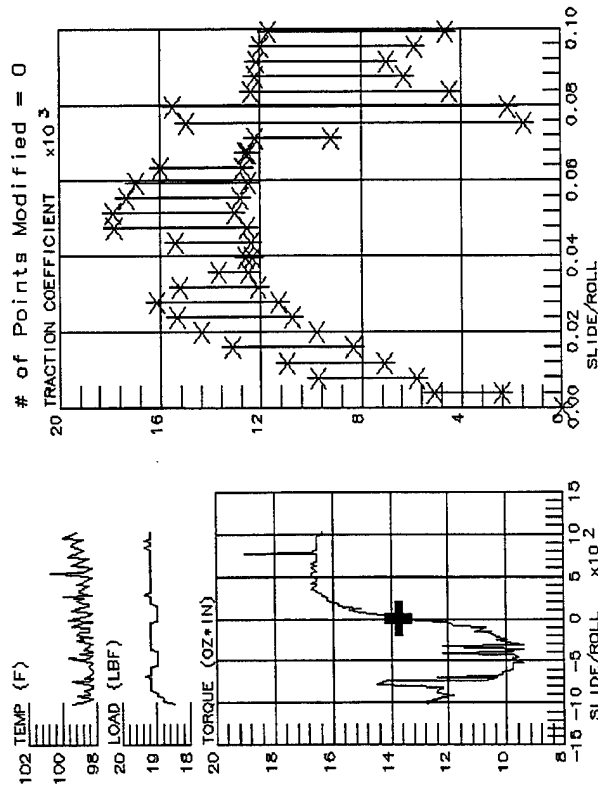
BO 81-288 ApiezonC+5%Bardhal(VacKote) #135
100F 65LBF 2546RPM 8 FILE: 81-288b0100



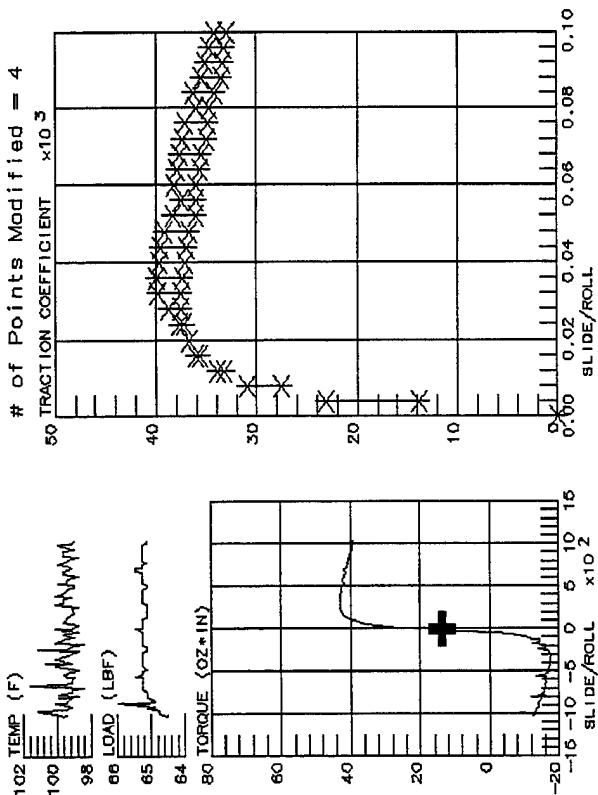
BO 81-288 ApiezonC+5%Bardhal(VacKote) #136
100F 154LBF 2546RPM 9 FILE: 81-288b0100



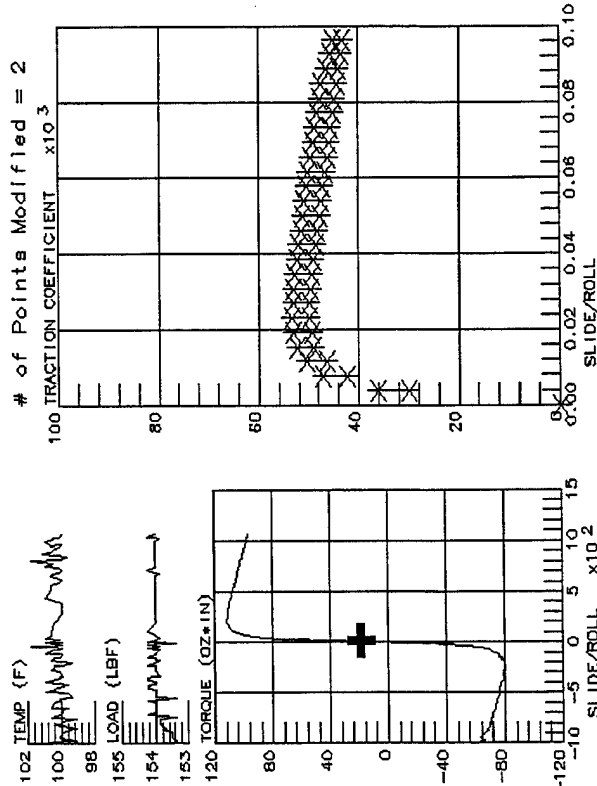
BO 81-288 ApiezonC+5%Bardhal(VacKote) #137
100F 19LBF 5093RPM 1 FILE: 81-288b0100



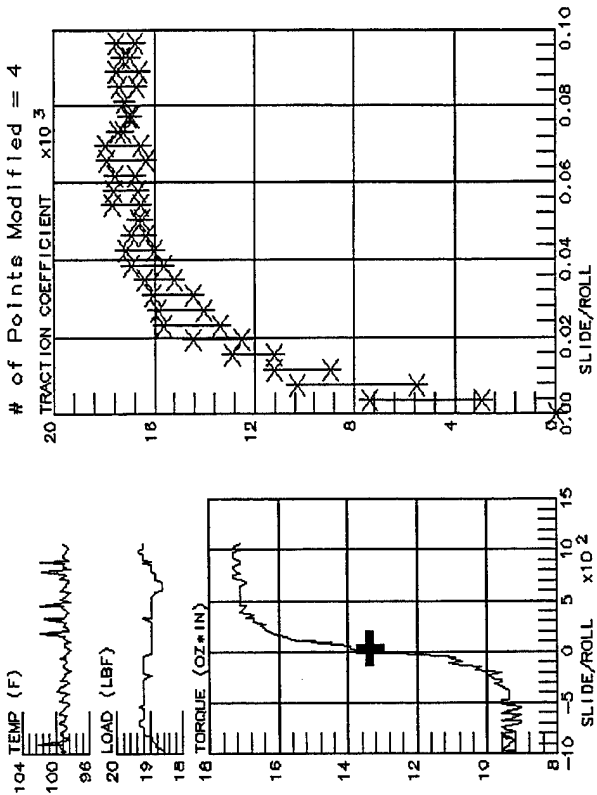
BO 81-288 ApiezonC+5%Bardhal(VacKote) #138
100F 65LBF 5093RPM 2 FILE: 81-288b0100



BO 81-288 ApiezonC+5%Bardhal(VacKote) #139
100F 154LBF 5093RPM 3 FILE: 81-288b0100

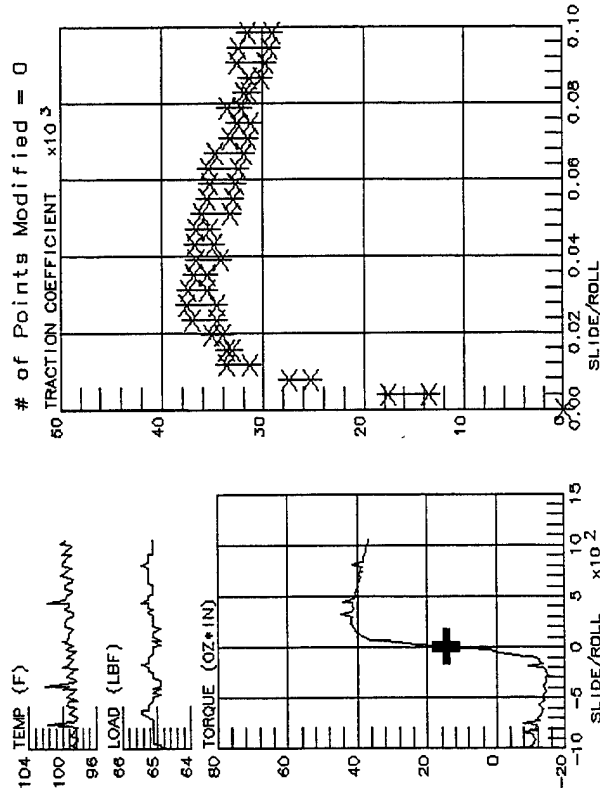


BO 81-288 ApiezonC+5%Bardhal(VacKote) #140
100F 19LBF 7639RPM 4 FILE: 81-288b0100

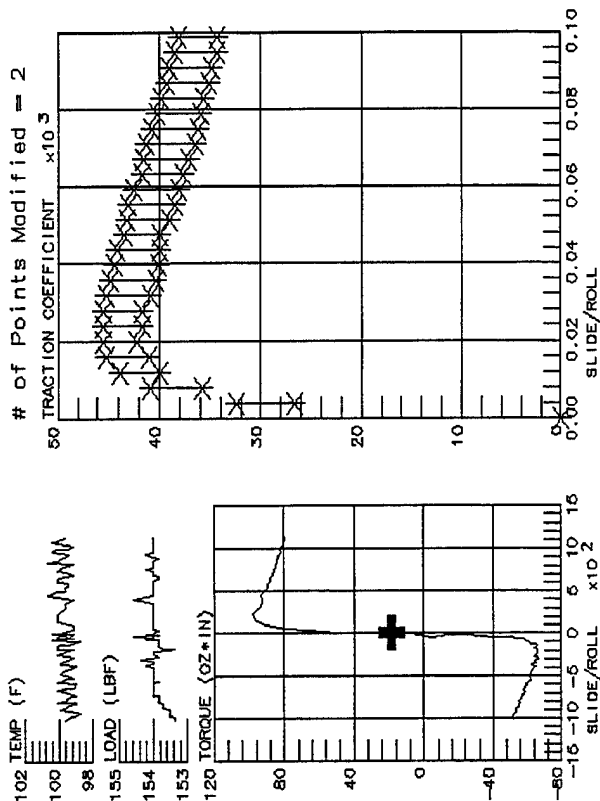


TRACTION MONITORING

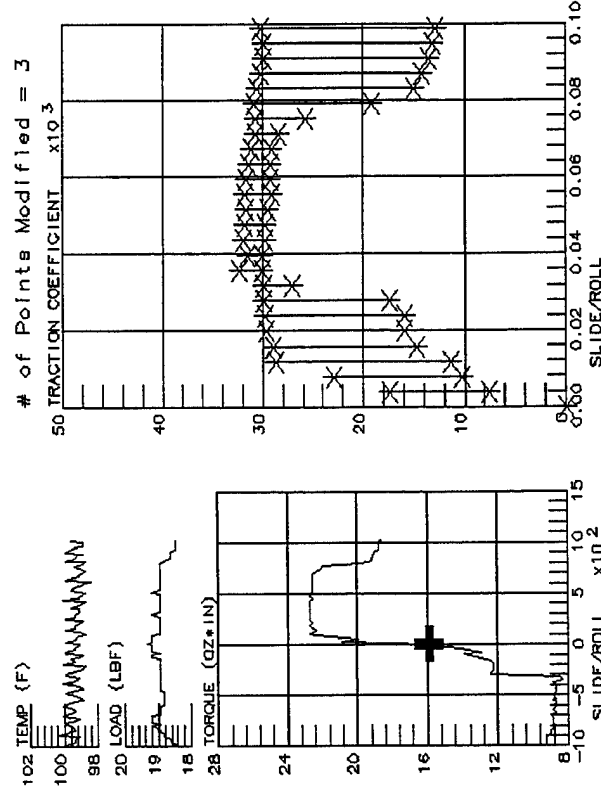
BO 81-288 ApiezonC+5%Bardhal(VacKote) #141
100F 65LBF 7639RPM 5 FILE: 81-288bo100



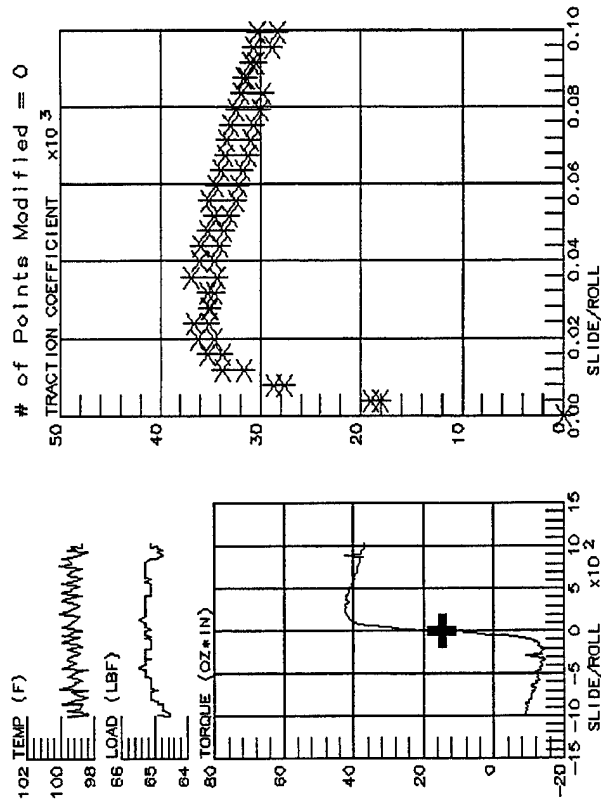
BO 81-288 ApiezonC+5%Bardhal(VacKote) #142
100F 164LBF 7639RPM 6 FILE: 81-288bo100



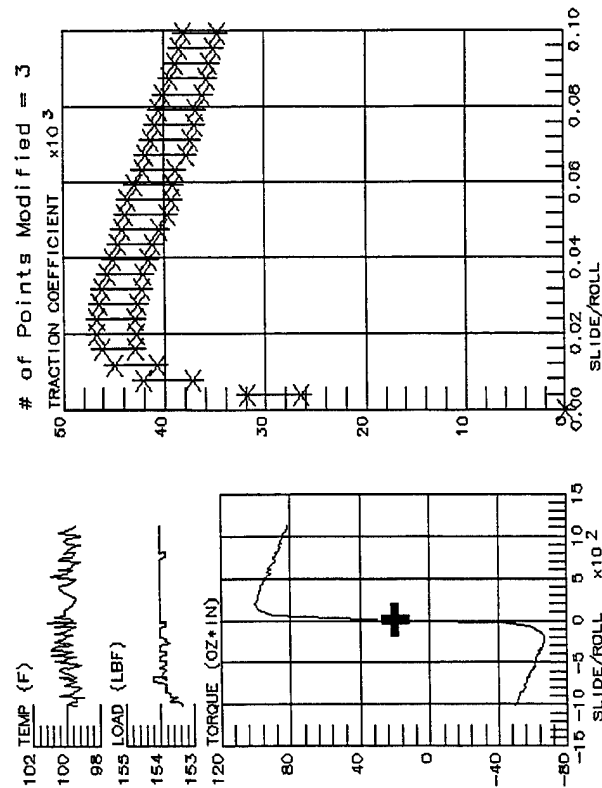
BO 81-288 ApiezonC+5%Bardhal(VacKote) #143
100F 19LBF 10186RPM 7 FILE: 81-288bo100



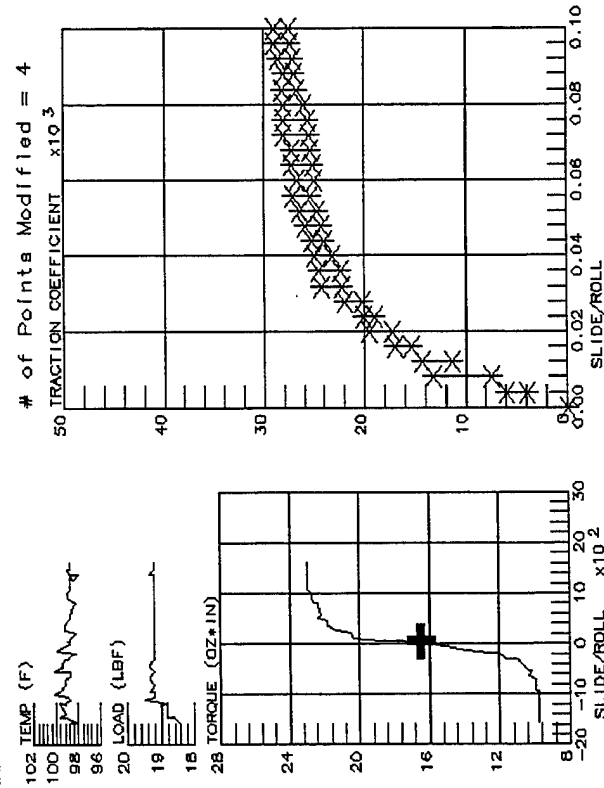
BO 81-288 ApiezonC+5%Bardhal(VacKote) #144
100F 65LBF 10186RPM 8 FILE: 81-288bo100



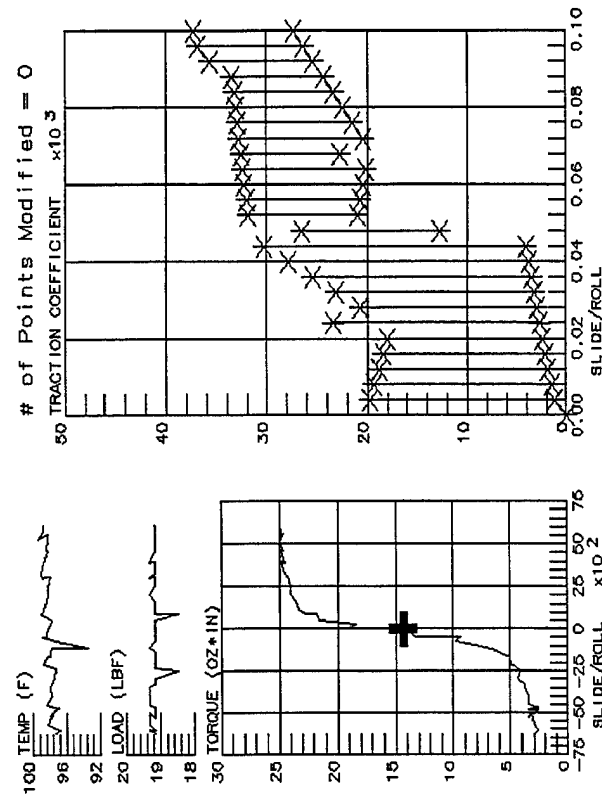
BO 81-288 ApiezonC+5%Bardhal(Vackote) #145
100F 154LBF 1018RPM 9 FILE: 81-288b0100



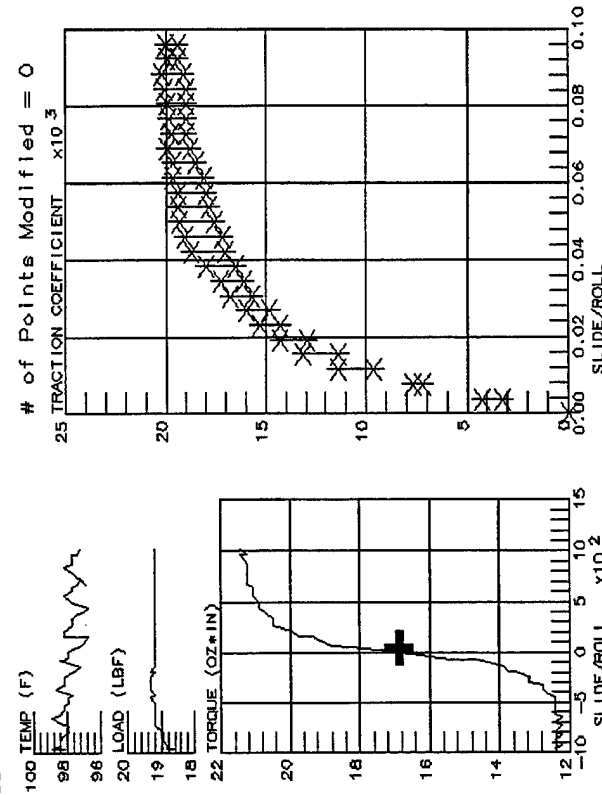
BO 81-288 ApiezonC+5%Bardhal(Vackote) #147
100F 19LBF 1273RPM 2 FILE: 81-288b0100



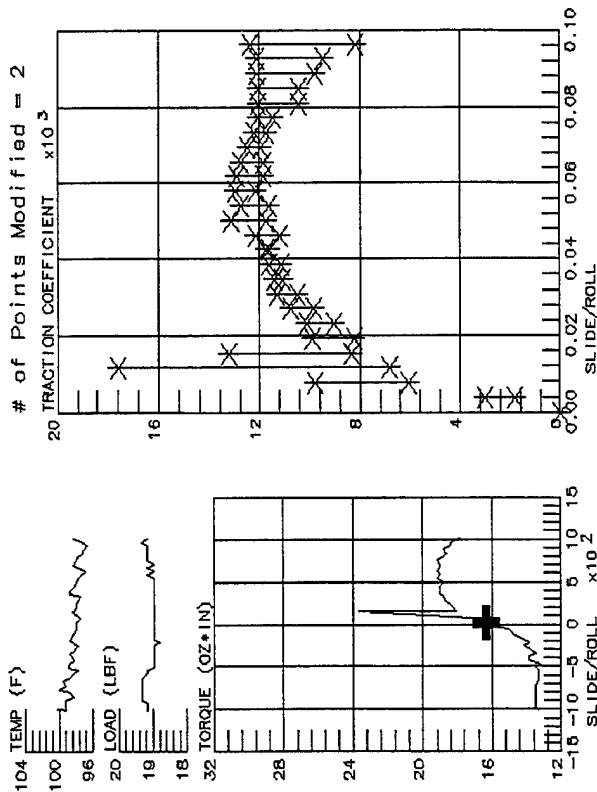
BO 81-288 ApiezonC+5%Bardhal(Vackote) #148
100F 19LBF 318RPM 1 FILE: 81-288b0100



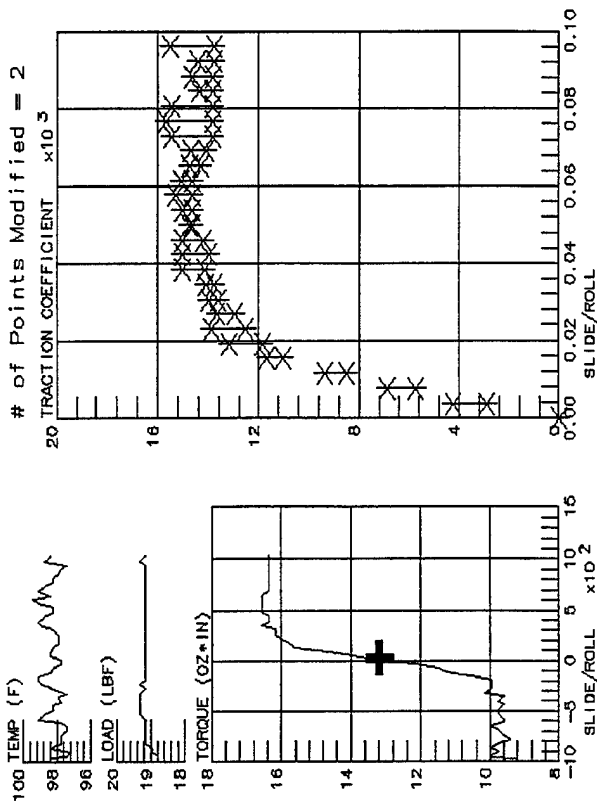
BO 81-288 ApiezonC+5%Bardhal(Vackote) #148
100F 19LBF 2548RPM 3 FILE: 81-288b0100



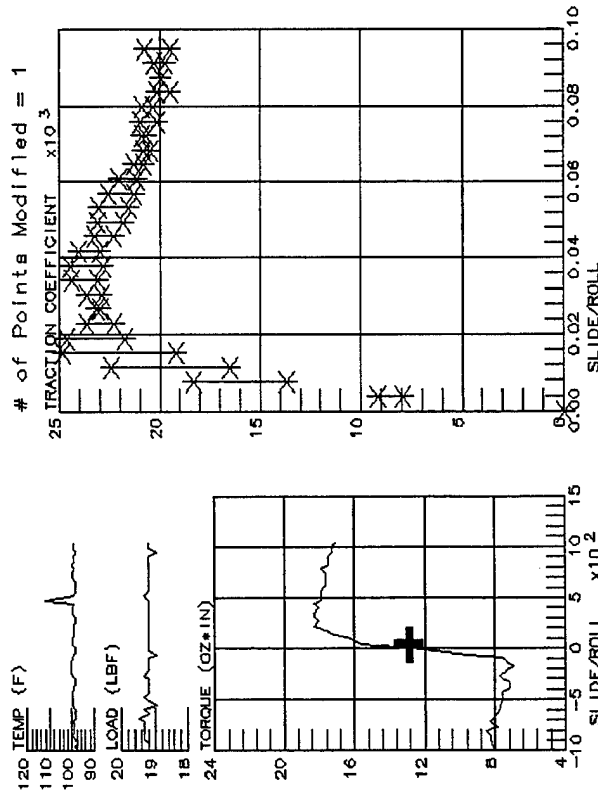
BO 81-288 ApiezonC+5%Bardhal(VacKote) #149
100F 19LBF 5093RPM 4 FILE: 81-288b0100



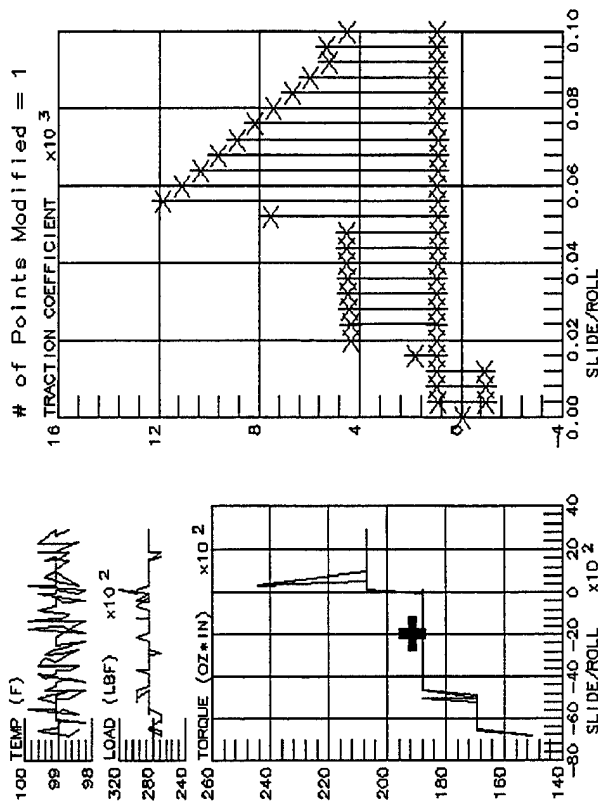
BO 81-288 ApiezonC+5%Bardhal(VacKote) #150
100F 19LBF 7639RPM 5 FILE: 81-288b0100



BO 81-288 ApiezonC+5%Bardhal(VacKote) #151
100F 19LBF 10186RPM 6 FILE: 81-288b0100

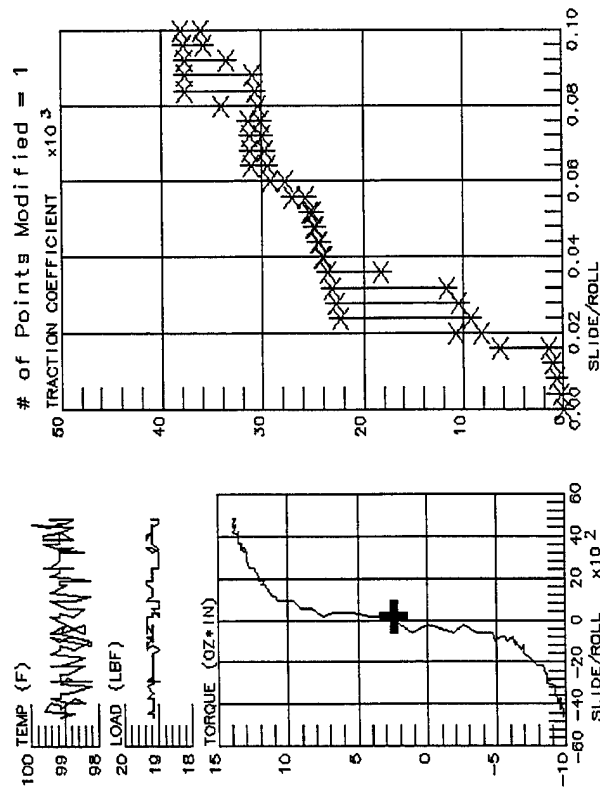


BO 81-288 ApiezonC+5%Bardhal(VacKote) #152
100F 3LBF 170RPM 1 FILE: 81-288b0100



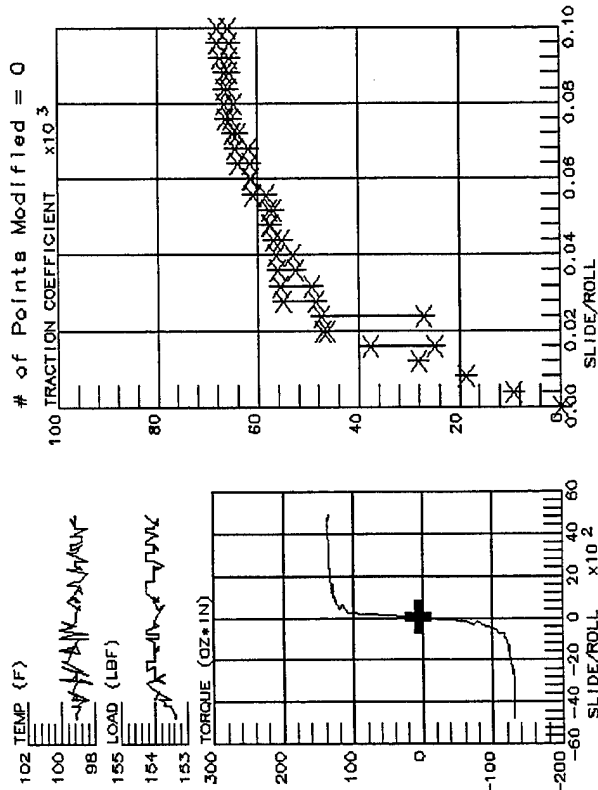
BO 81-288 ApiezonC+5%Bardhal(VacKote) #153
100F 19LBF 170RPM 2 FILE: 81-288b0100

of Points Modified = 1



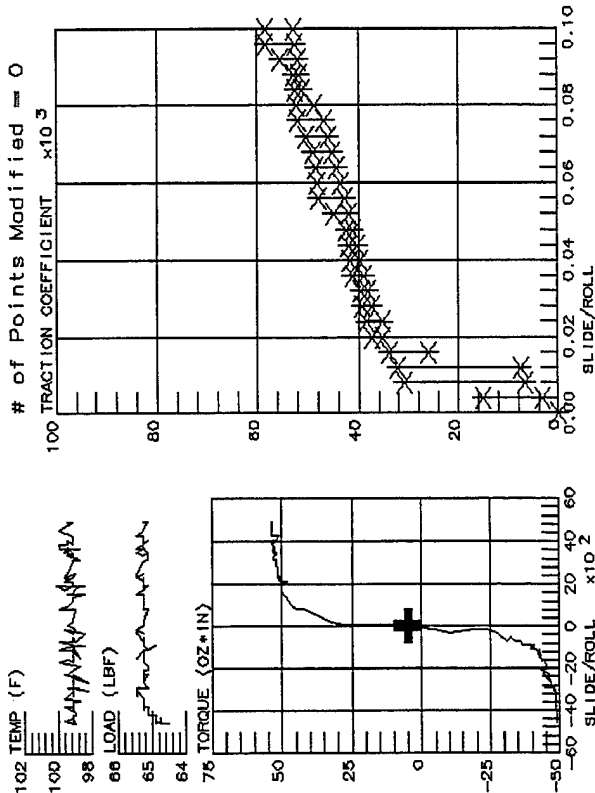
BO 81-288 ApiezonC+5%Bardhal(VacKote) #155
100F 154LBF 170RPM 4 FILE: 81-288b0100

of Points Modified = 0



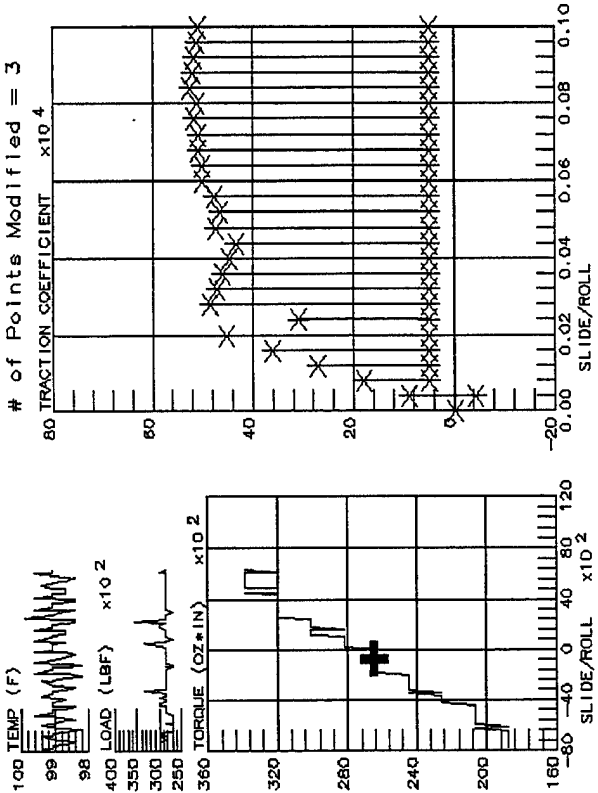
BO 81-288 ApiezonC+5%Bardhal(VacKote) #154
100F 66LBF 170RPM 3 FILE: 81-288b0100

of Points Modified = 0



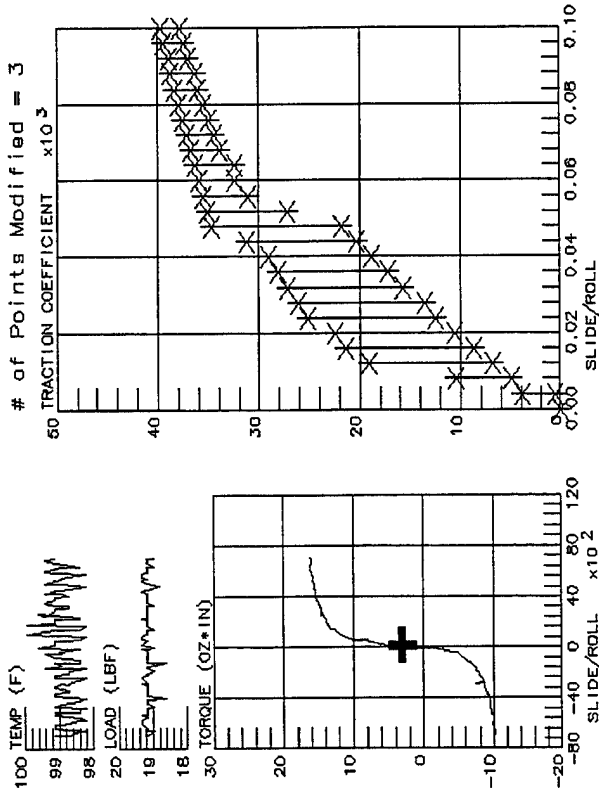
BO 81-288 ApiezonC+5%Bardhal(VacKote) #156
100F 3LBF 273RPM 5 FILE: 81-288b0100

of Points Modified = 3

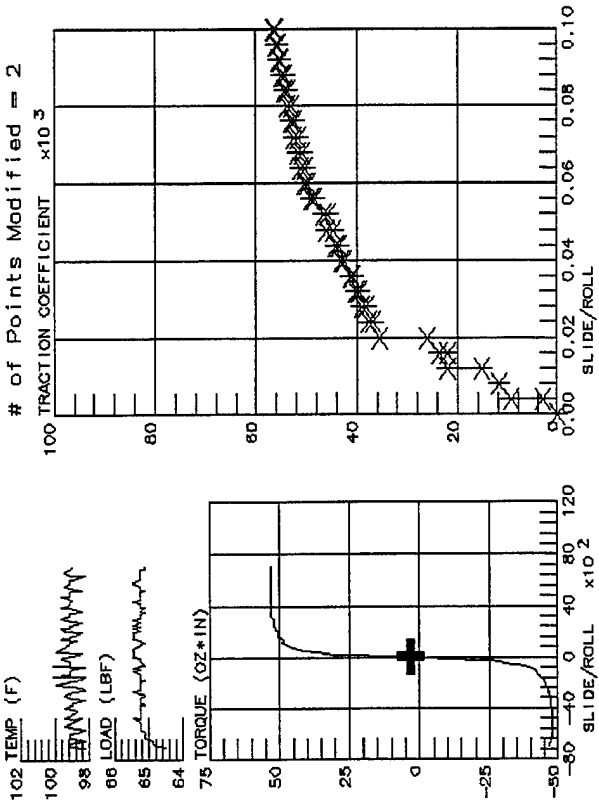


TRACTION MONITORING

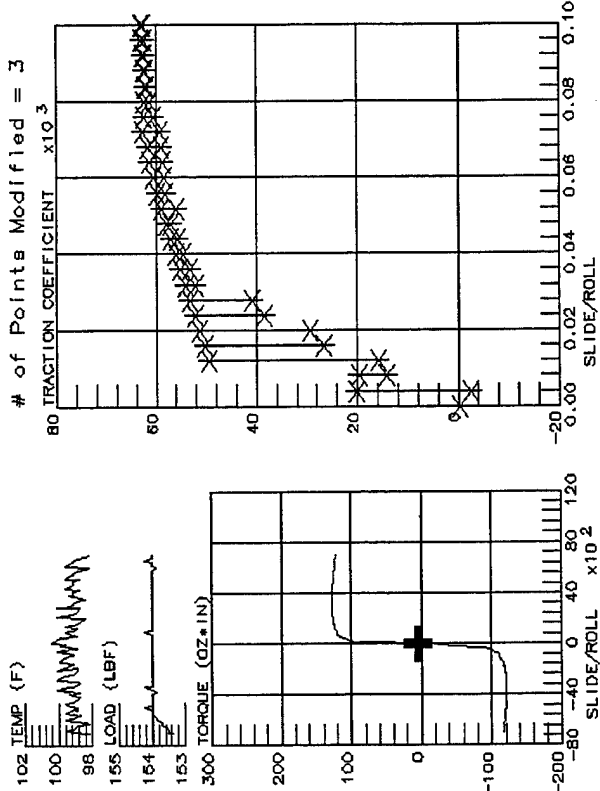
BO 81-288 ApiezonC+5%Bardhal (VacKote) #157
100F 19LBF 273RPM 6 FILE: 81-288b0100



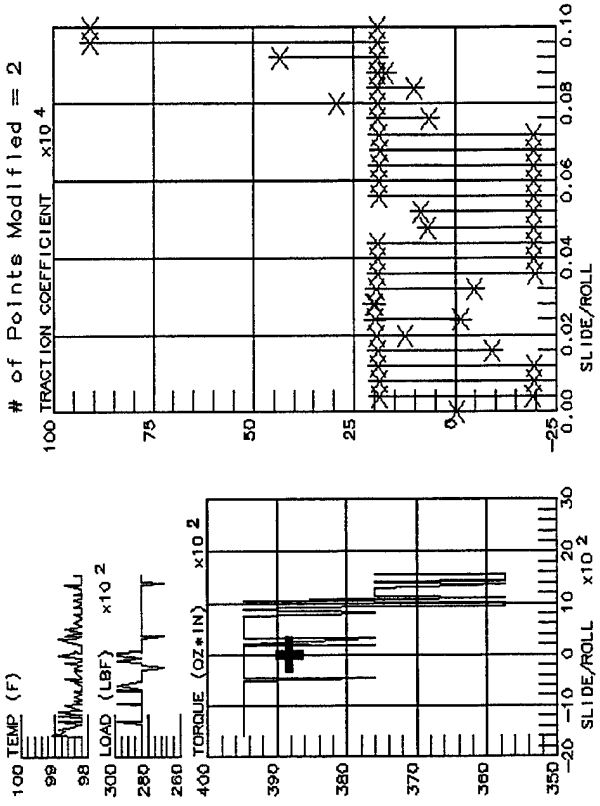
BO 81-288 ApiezonC+5%Bardhal (VacKote) #158
100F 65LBF 273RPM 7 FILE: 81-288b0100



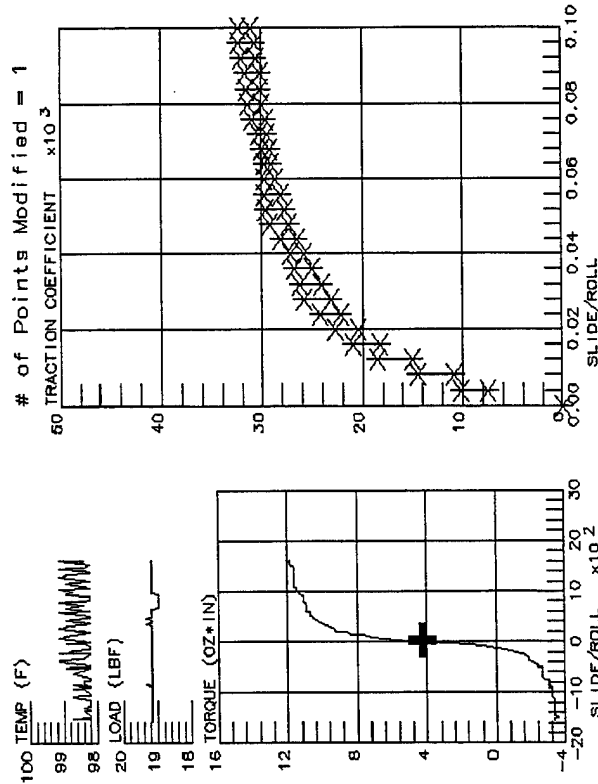
BO 81-288 ApiezonC+5%Bardhal (VacKote) #159
100F 154LBF 273RPM 8 FILE: 81-288b0100



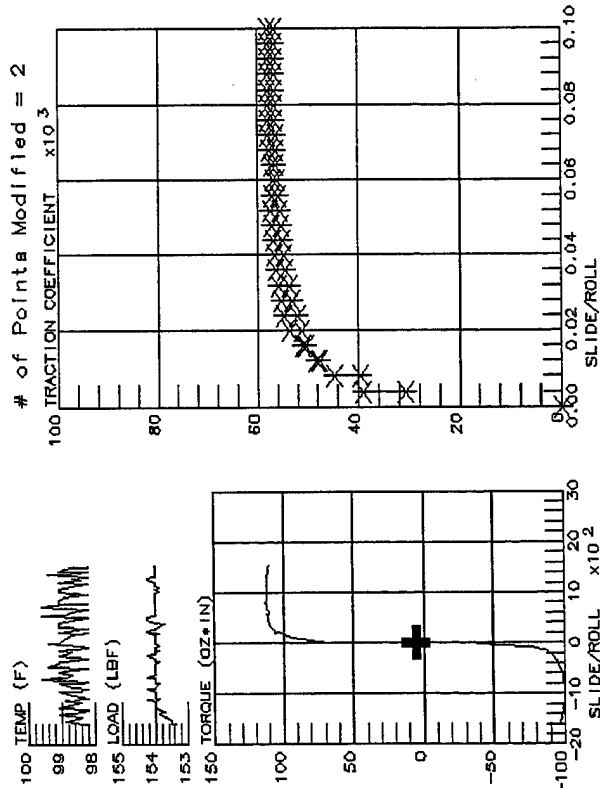
BO 81-288 ApiezonC+5%Bardhal (VacKote) #160
100F 3LBF 1273RPM 9 FILE: 81-288b0100



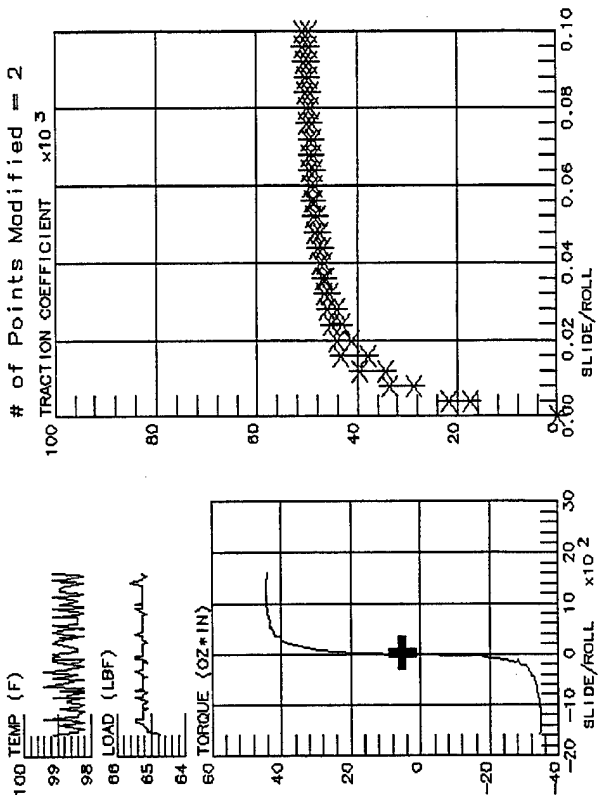
BO 81-288 ApiezonC+5%Bardhal(Vackote) #161
100F 19LBF 1273RPM 10 FILE: 81-288b0100



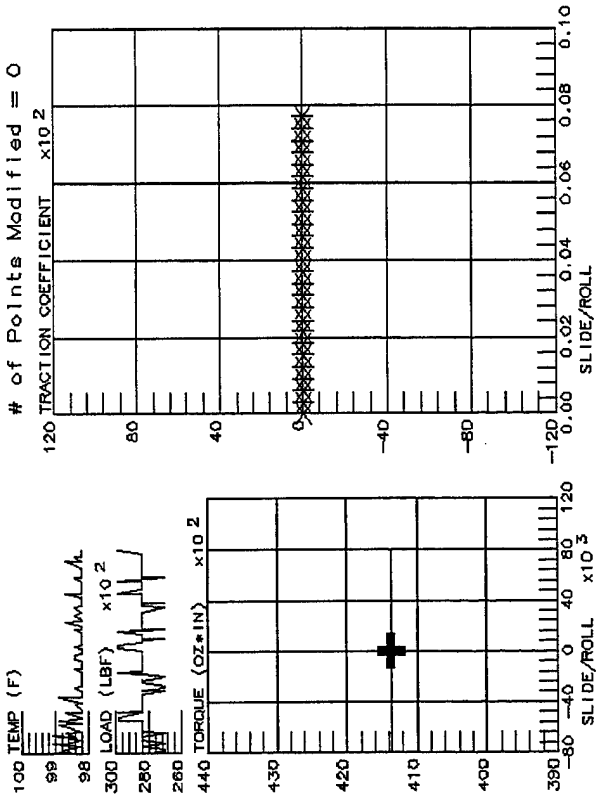
BO 81-288 ApiezonC+5%Bardhal(Vackote) #163
100F 154LBF 1273RPM 12 FILE: 81-288b0100



BO 81-288 ApiezonC+5%Bardhal(Vackote) #162
100F 65LBF 1273RPM 11 FILE: 81-288b0100



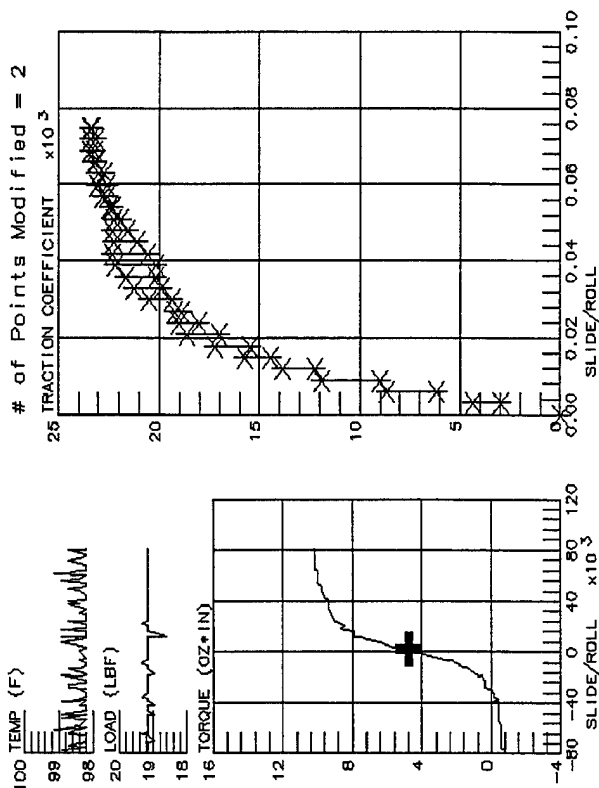
BO 81-288 ApiezonC+5%Bardhal(Vackote) #164
100F 3LBF 2546RPM 13 FILE: 81-288b0100



SHIH-HONG HAOI-KOYU

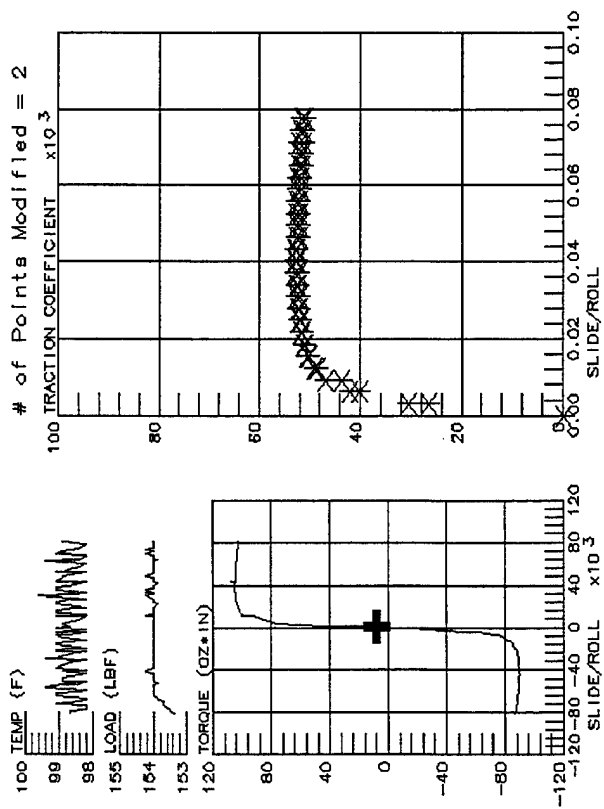
BO 81-288 ApiezonC+5%Bardhal (VacKote) #185
100F 19LBF 2546RPM 14 FILE: 81-288b0100

of Points Modified = 2



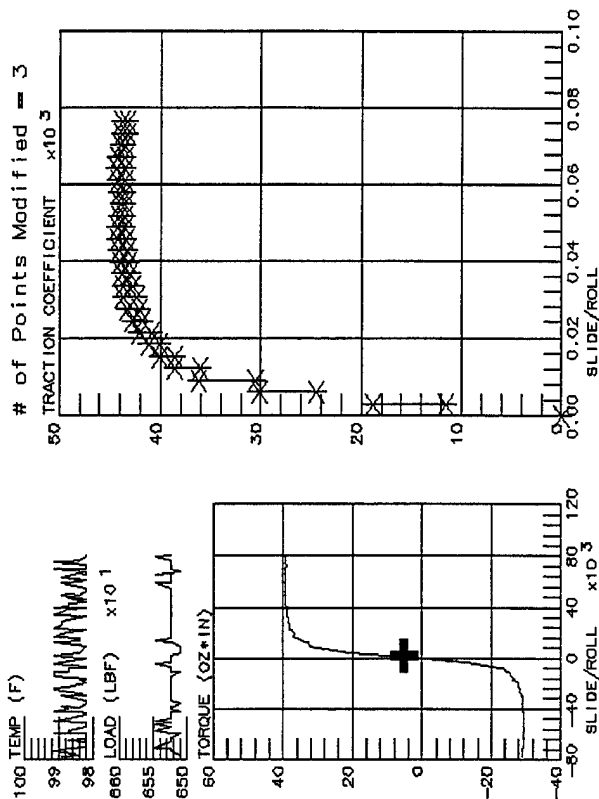
BO 81-288 ApiezonC+5%Bardhal (VacKote) #167
100F 154LBF 2546RPM 16 FILE: 81-288b0100

of Points Modified = 2



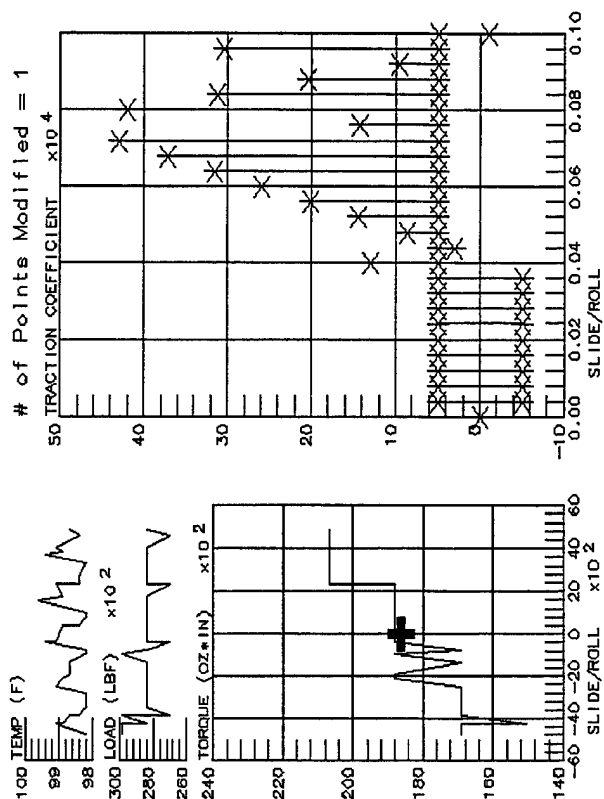
BO 81-288 ApiezonC+5%Bardhal(VacKote) #168
100F 65LEF 2548RPM 15 FILE: 81-288b.o100

of Points Modified = 3

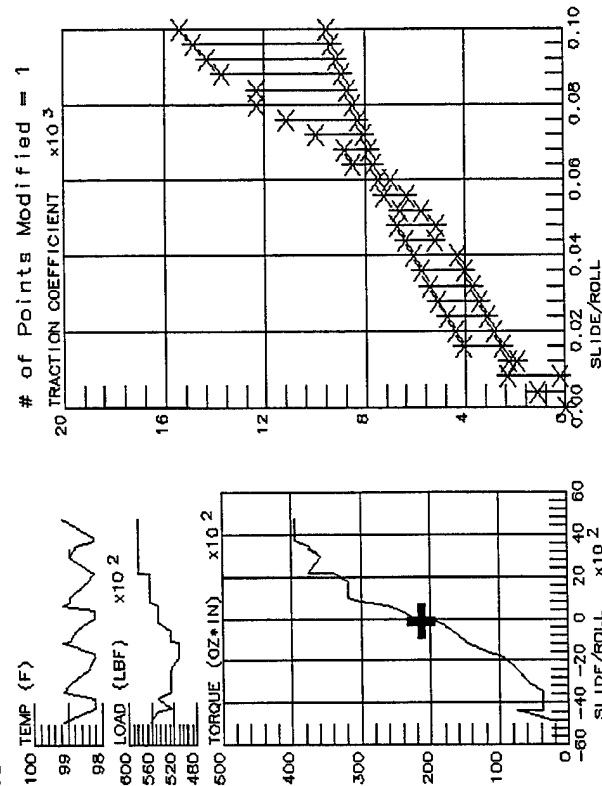


BO 81-288 ApiezonC+5%Bardhal (VacKote) #168
100F 3LBF 170RPM 1 FILE: 81-288b0100

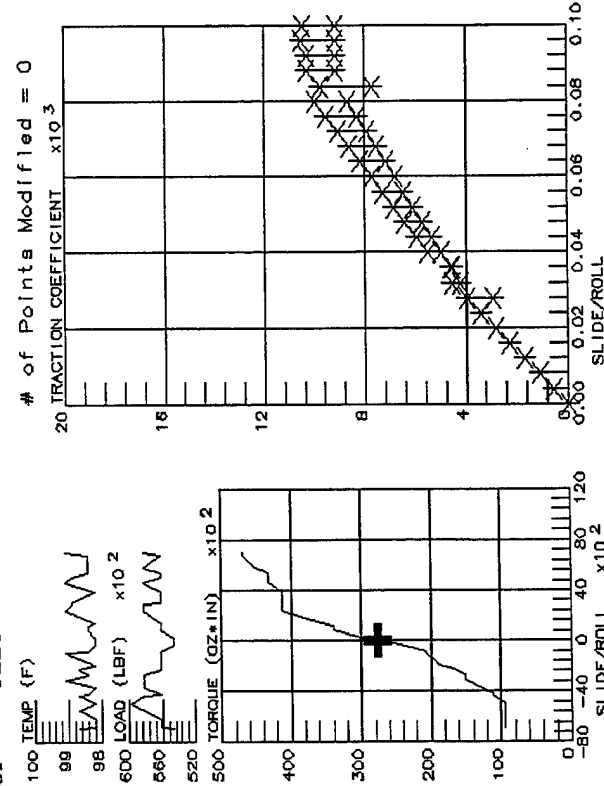
of Points Modified = 1



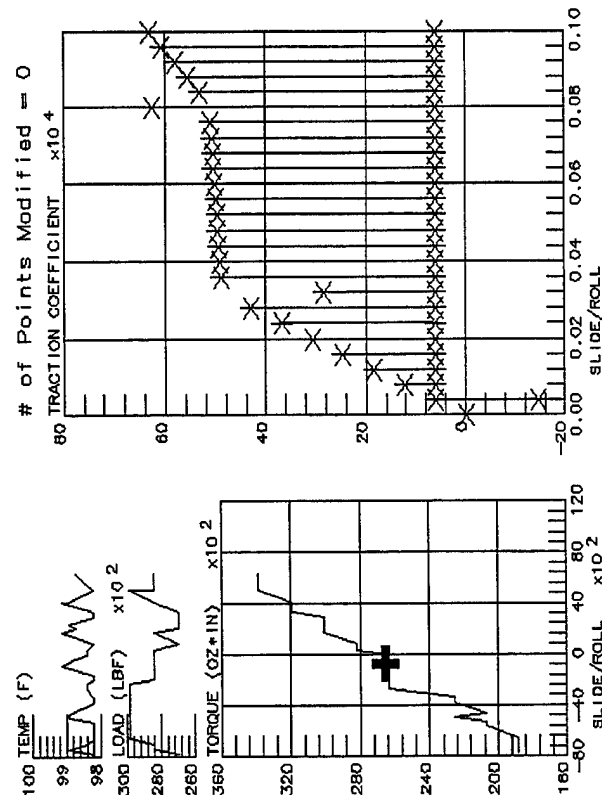
BO 81-288 ApiezonC+5%Bardhal(VacKote) #189
100F 6LBF 170RPM 2 FILE: 81-288b0100



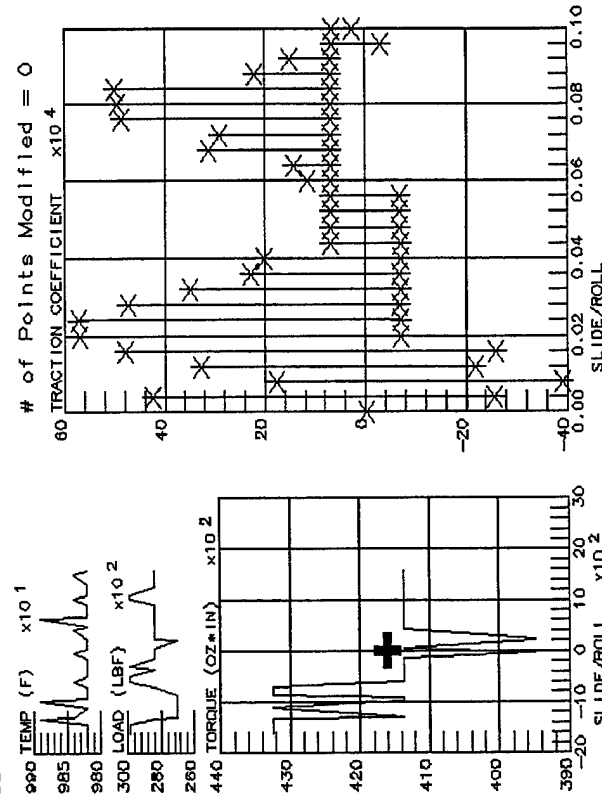
BO 81-288 ApiezonC+5%Bardhal(VacKote) #171
100F 6LBF 273RPM 4 FILE: 81-288b0100



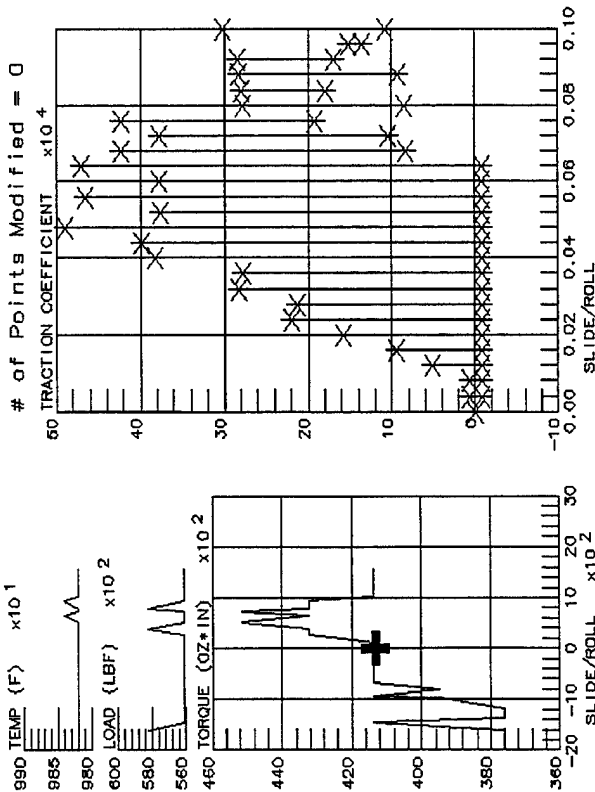
BO 81-288 ApiezonC+5%Bardhal(VacKote) #170
100F 3LBF 273RPM 3 FILE: 81-288b0100



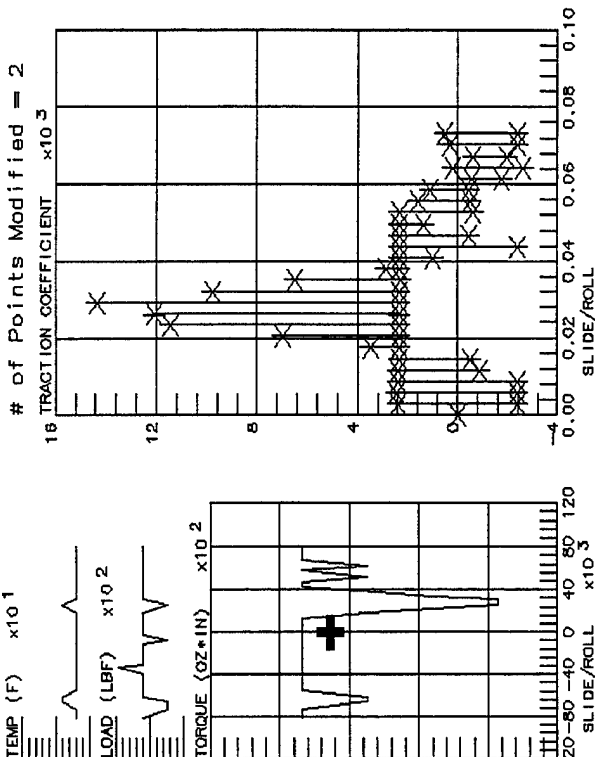
BO 81-288 ApiezonC+5%Bardhal(VacKote) #172
100F 3LBF 1273RPM 5 FILE: 81-288b0100



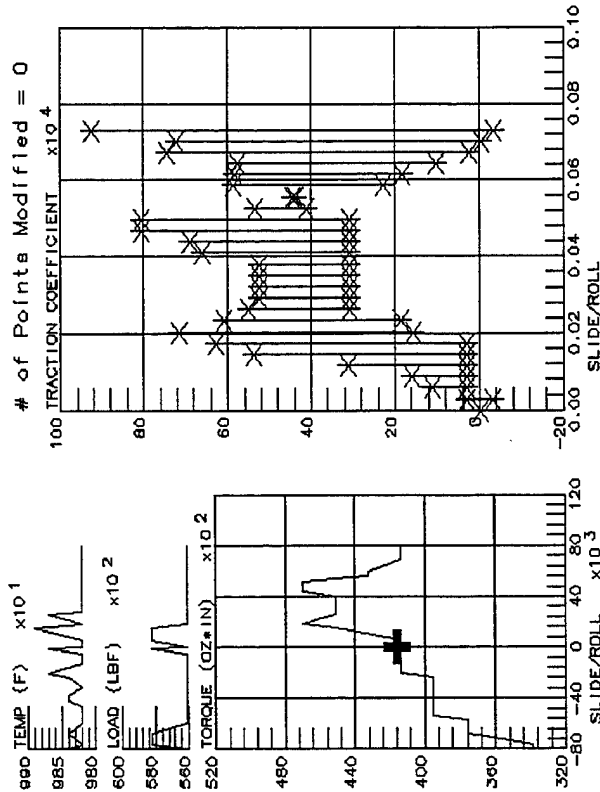
BO 81-288 ApiezonC+5%Bardhal(VacKote) #173
100F 6LBF 1273RPM 8 FILE: 81-288bo100



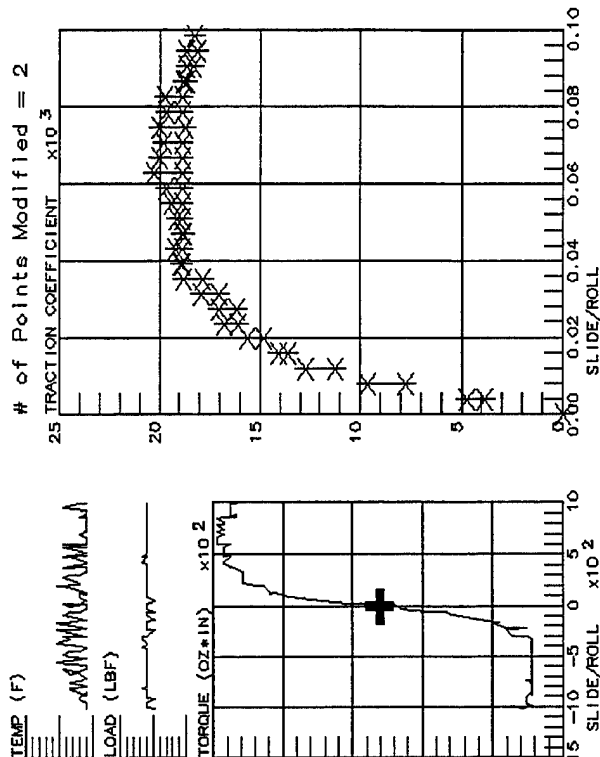
BO 81-288 ApiezonC+5%Bardhal(VacKote) #174
100F 3LBF 2546RPM 7 FILE: 81-288bo100



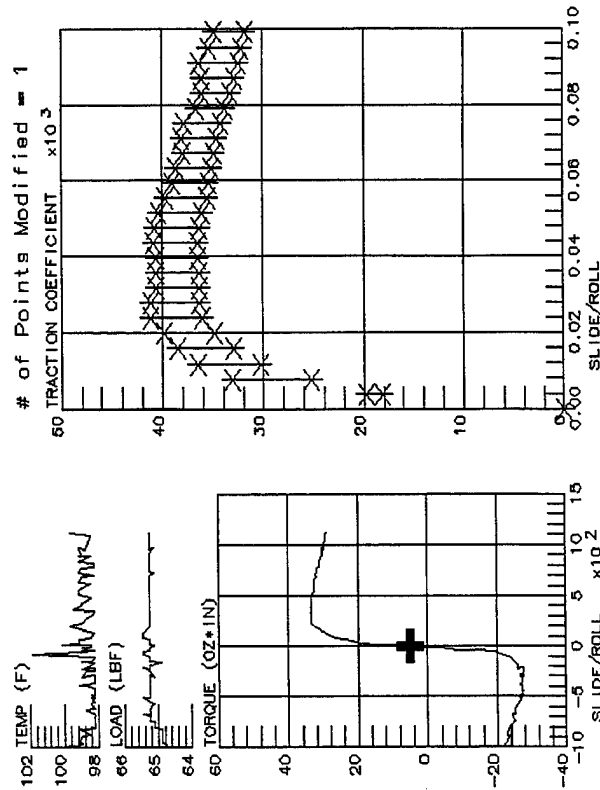
BO 81-288 ApiezonC+5%Bardhal(VacKote) #175
100F 6LBF 2546RPM 8 FILE: 81-288bo100



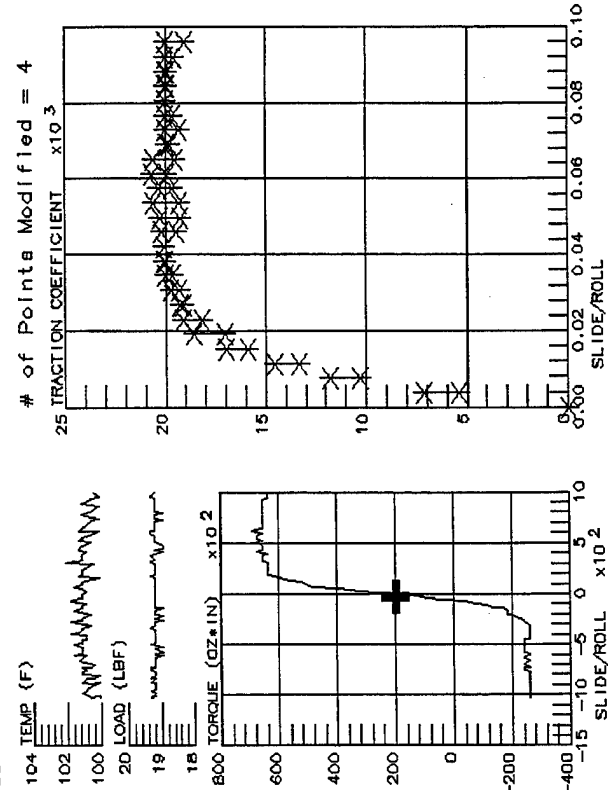
BO 81-288 ApiezonC+5%Bardhal(VacKote) #176
100F 19LBF 5093RPM 1 FILE: 81-288bo100



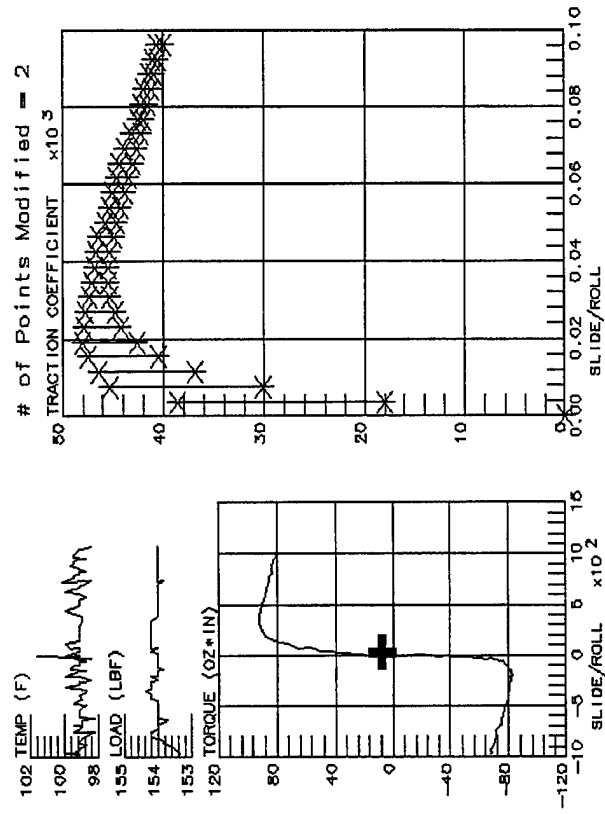
BO 81-288 ApiezonC+5%Bardhal(VacKote) #177
100F 65LBF 5093RPM 2 FILE: 81-288bo100



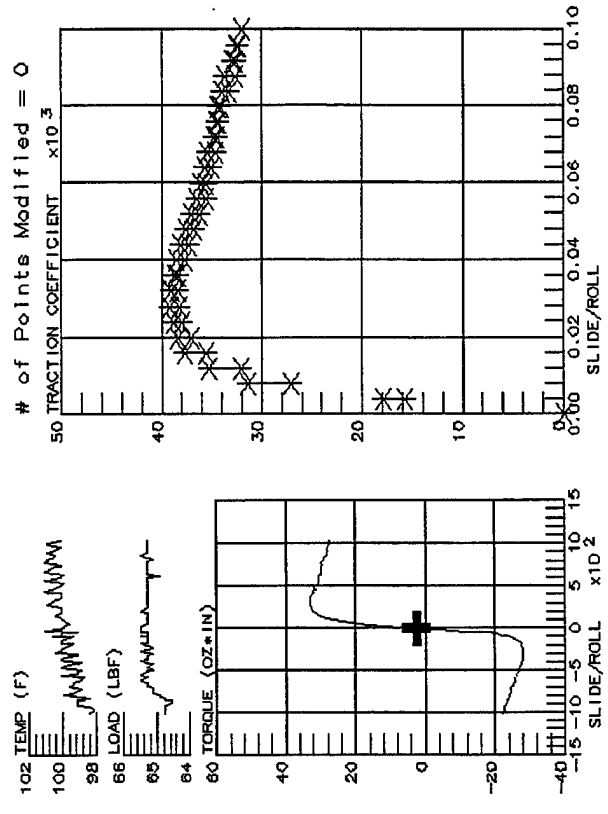
BO 81-288 ApiezonC+5%Bardhal(VacKote) #179
100F 19LBF 7639RPM 4 FILE: 81-288bo100



BO 81-288 ApiezonC+5%Bardhal(VacKote) #178
100F 154LBF 5093RPM 3 FILE: 81-288bo100

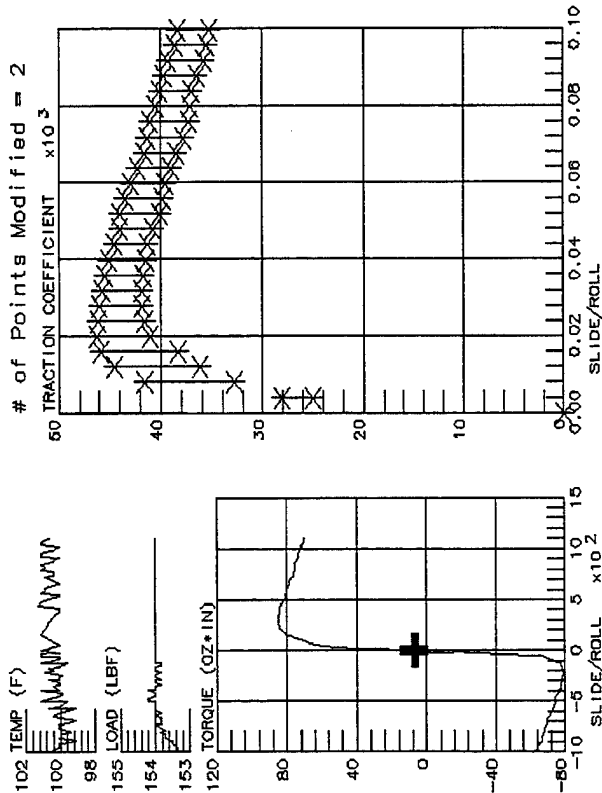


BO 81-288 ApiezonC+5%Bardhal(VacKote) #180
100F 65LBF 7639RPM 5 FILE: 81-288bo100

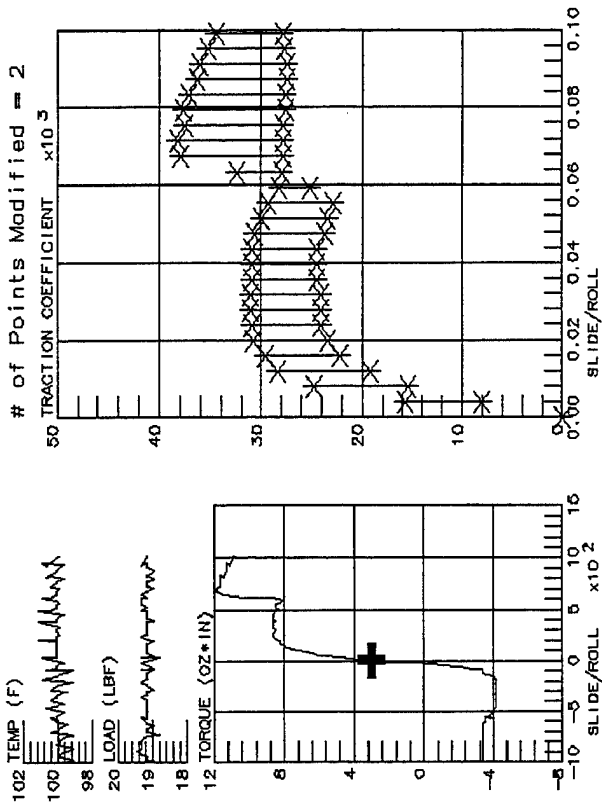


TRACTION MODELS

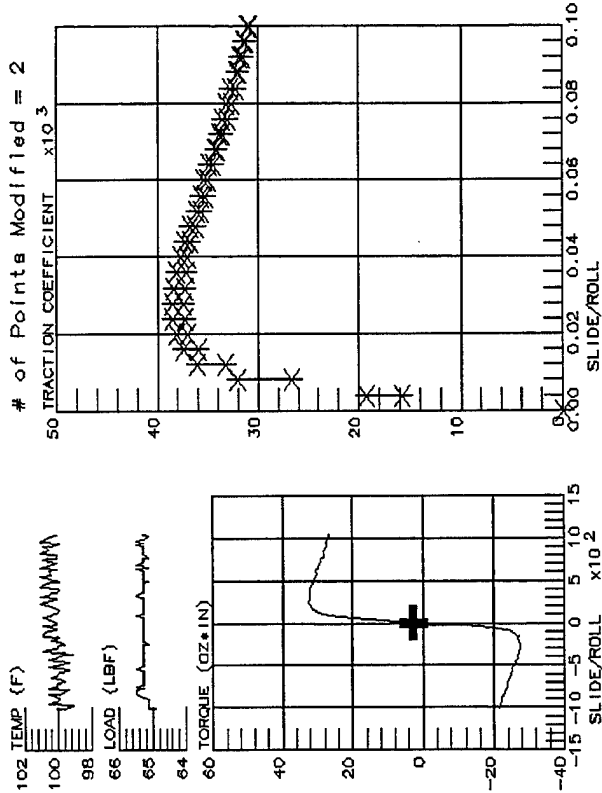
BO 81-288 ApiezonC+5%Bardhal (VacKote) #181
100F 154LBF 7639RPM 8 FILE: 81-288b0100



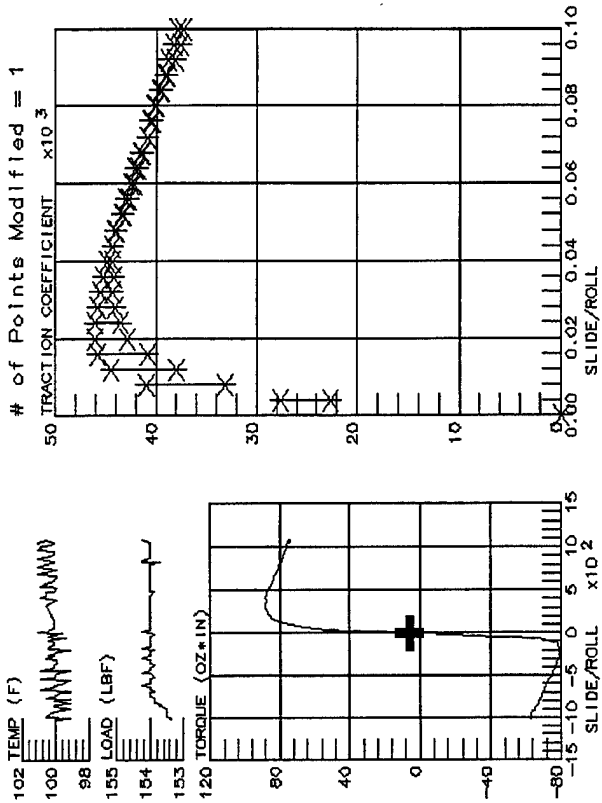
BO 81-288 ApiezonC+5%Bardhal (VacKote) #182
100F 191LBF 10186RPM 7 FILE: 81-288b0100



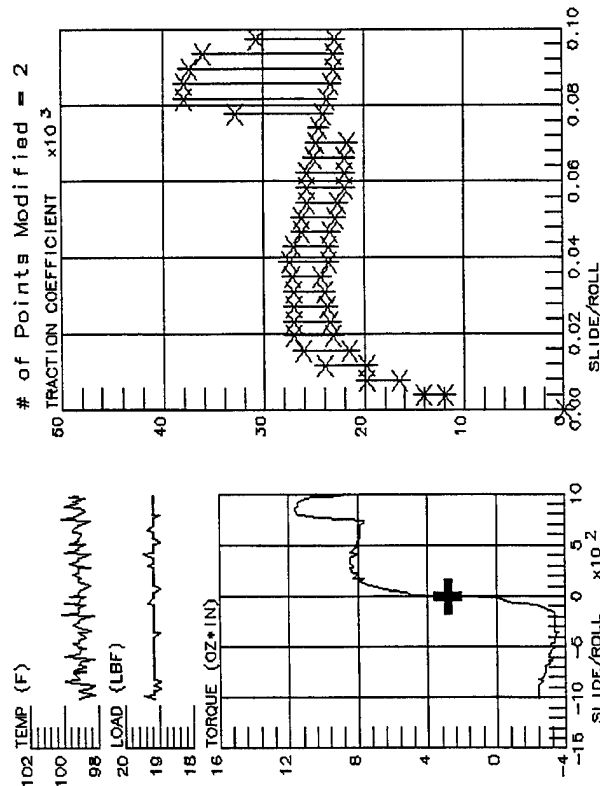
BO 81-288 ApiezonC+5%Bardhal (VacKote) #183
100F 65LBF 10186RPM 8 FILE: 81-288b0100



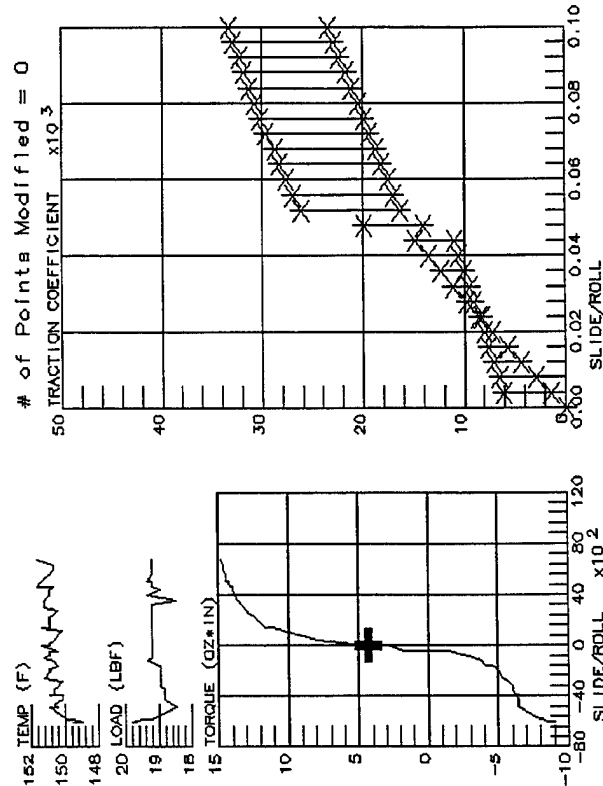
BO 81-288 ApiezonC+5%Bardhal (VacKote) #184
100F 154LBF 10186RPM 9 FILE: 81-288b0100



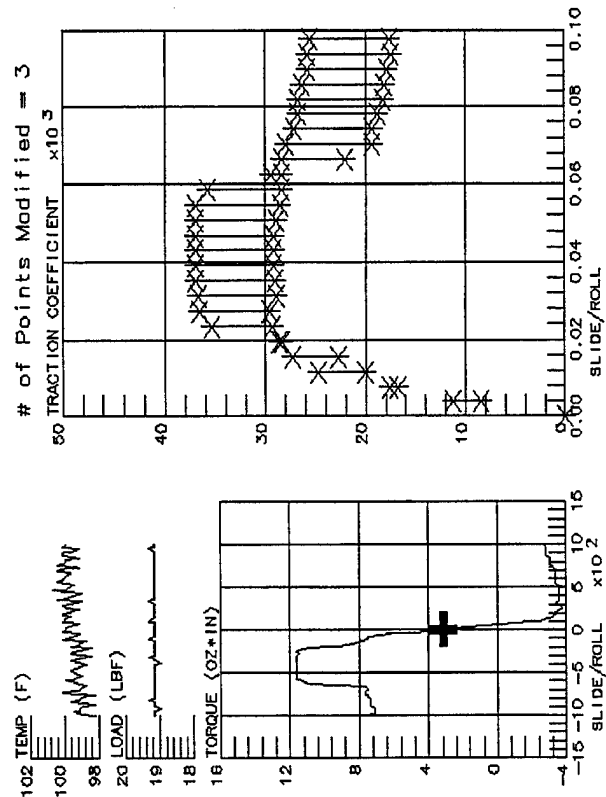
BO 81-288 ApiezonC+5%Bardhal(Vackote) #186
100F 19LBF 1018RPM 1 FILE: 81-288b0100



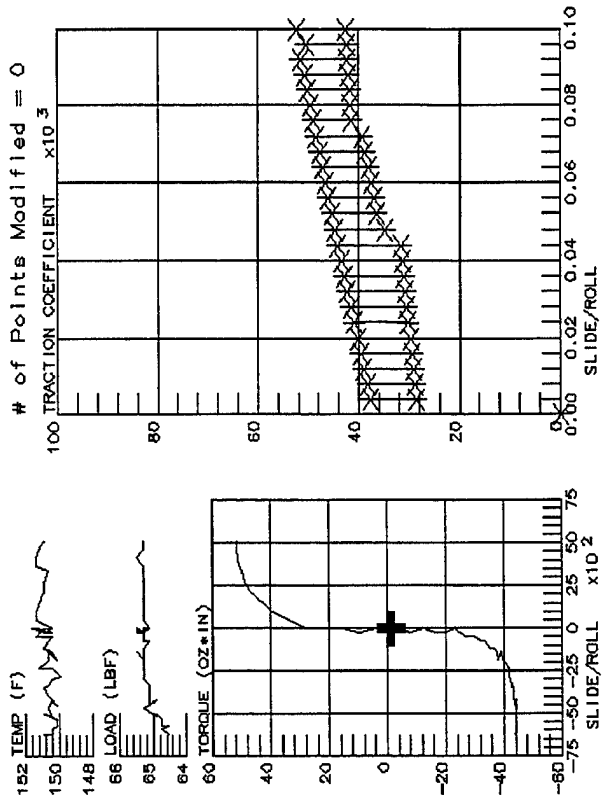
BO 81-288 ApiezonC+5%Bardhal(Vackote) #187
150F 19LBF 318RPM 1 FILE: 81-288b0150



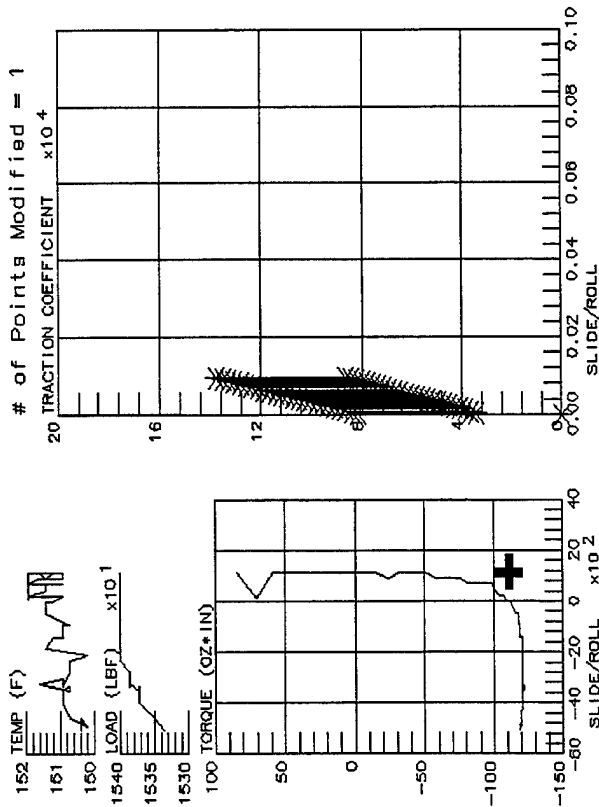
BO 81-288 ApiezonC+5%Bardhal(Vackote) #188
100F 19LBF 1018RPM 2 FILE: 81-288b0100



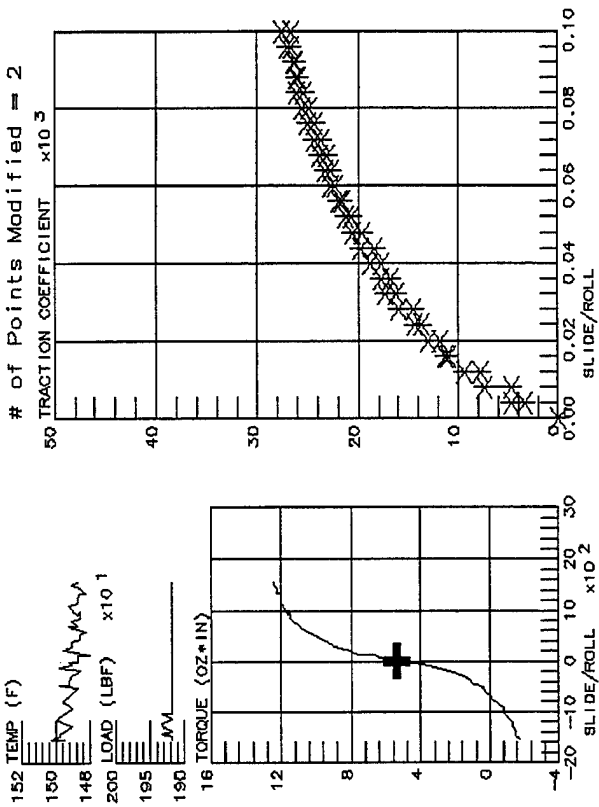
BO 81-288 ApiezonC+5%Bardhal(Vackote) #188
150F 65LBF 318RPM 2 FILE: 81-288b0150



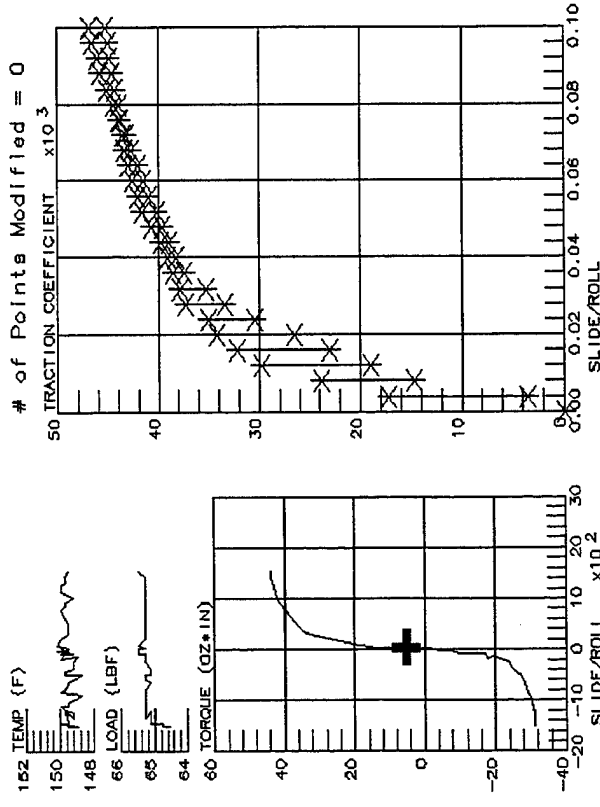
BO 81-288 ApiezonC+5%Bardhal(VacKote) #189
150F 154LBF 318RPM 3 FILE: 81-288bo150



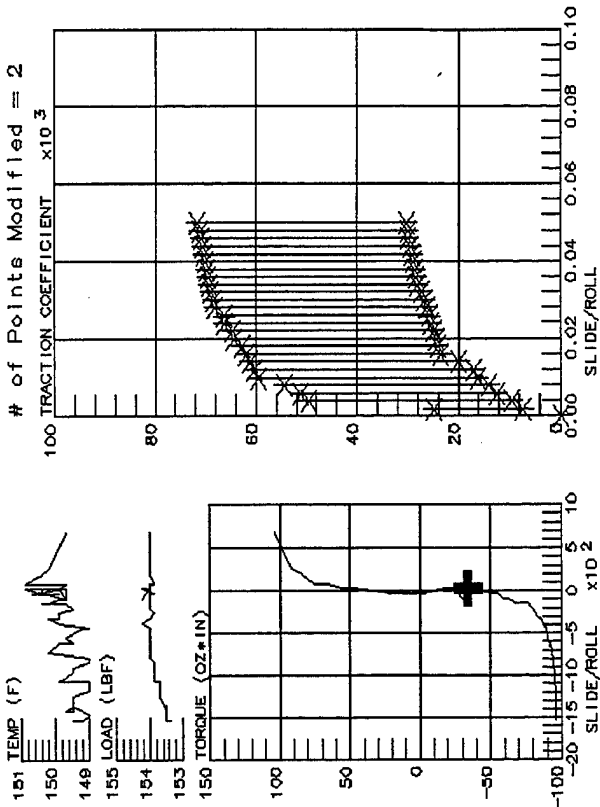
BO 81-288 ApiezonC+5%Bardhal(VacKote) #190
150F 19LBF 1273RPM 4 FILE: 81-288bo150



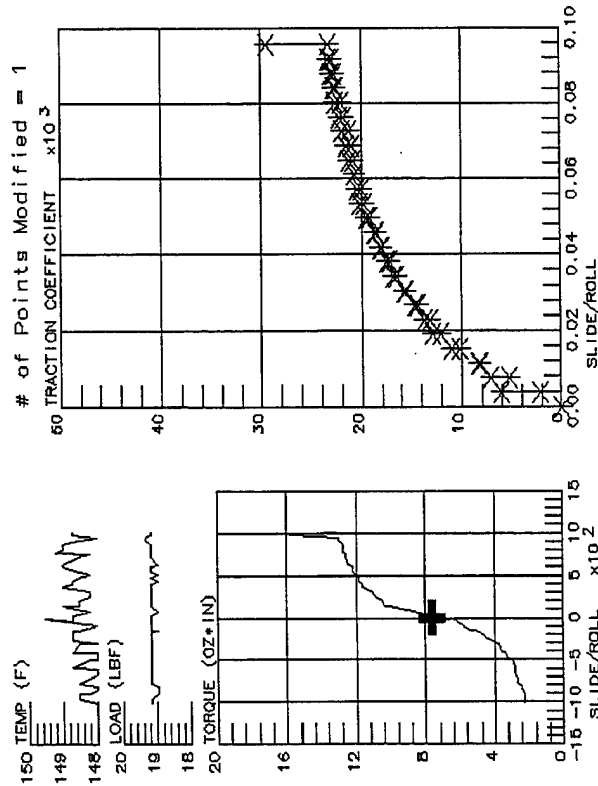
BO 81-288 ApiezonC+5%Bardhal(VacKote) #191
150F 65LBF 1273RPM 5 FILE: 81-288bo150



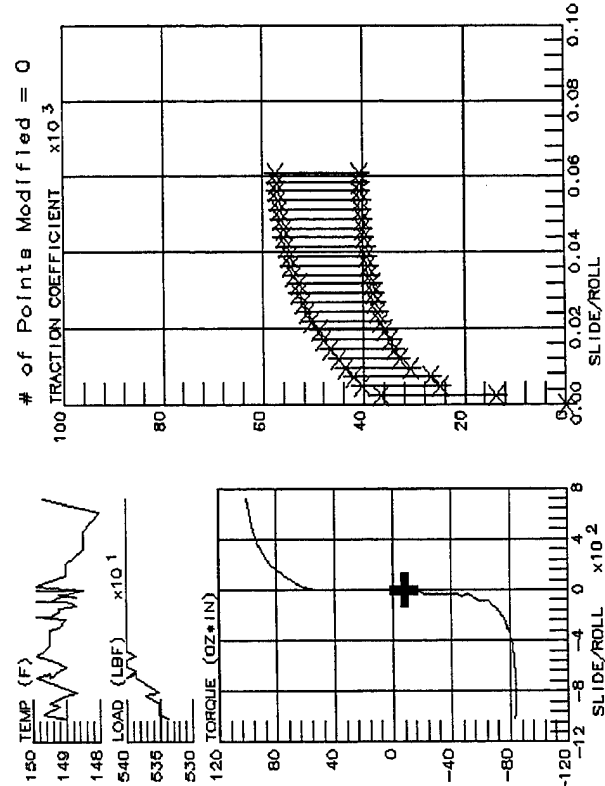
BO 81-288 ApiezonC+5%Bardhal(VacKote) #192
150F 154LBF 1273RPM 6 FILE: 81-288bo150



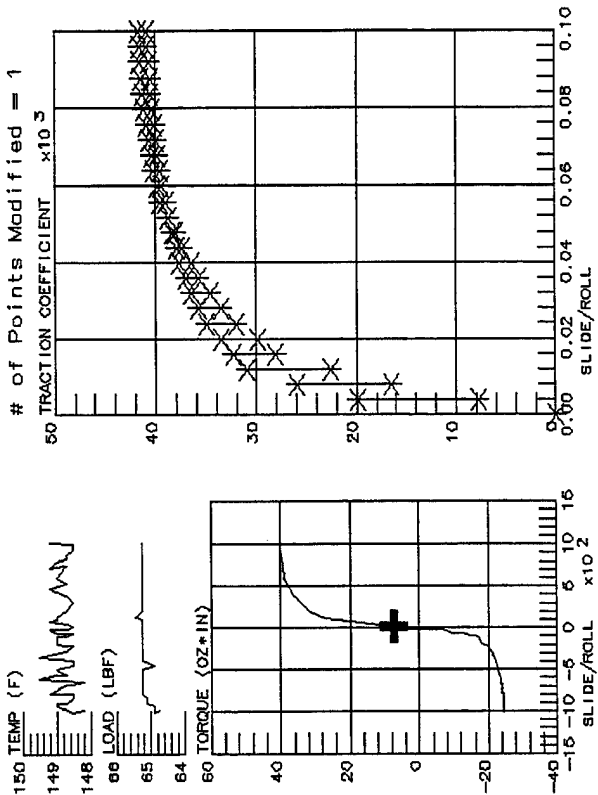
BO 81-288 ApiezonC+5%Bardhal(VacKote) #193
150F 19LBF 2546RPM 7 FILE: 81-288bo150



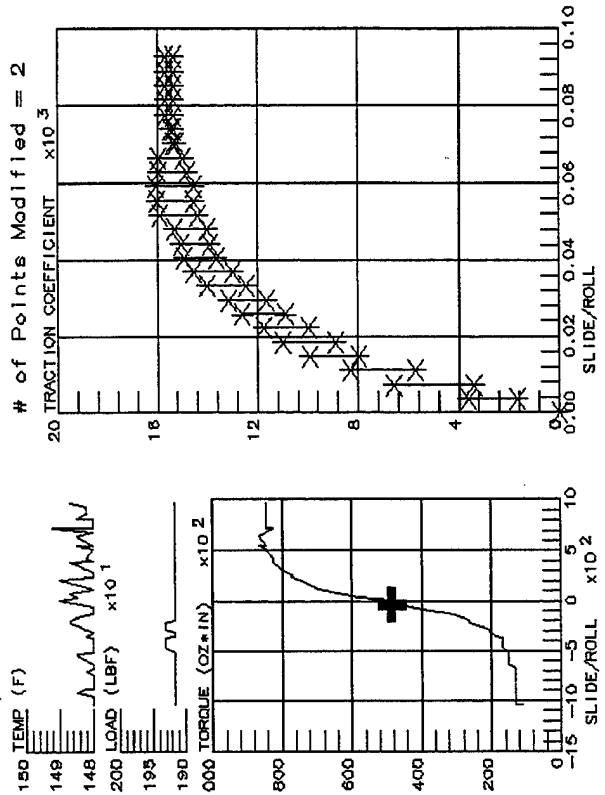
BO 81-288 ApiezonC+5%Bardhal(VacKote) #195
150F 154LBF 2546RPM 9 FILE: 81-288bo150



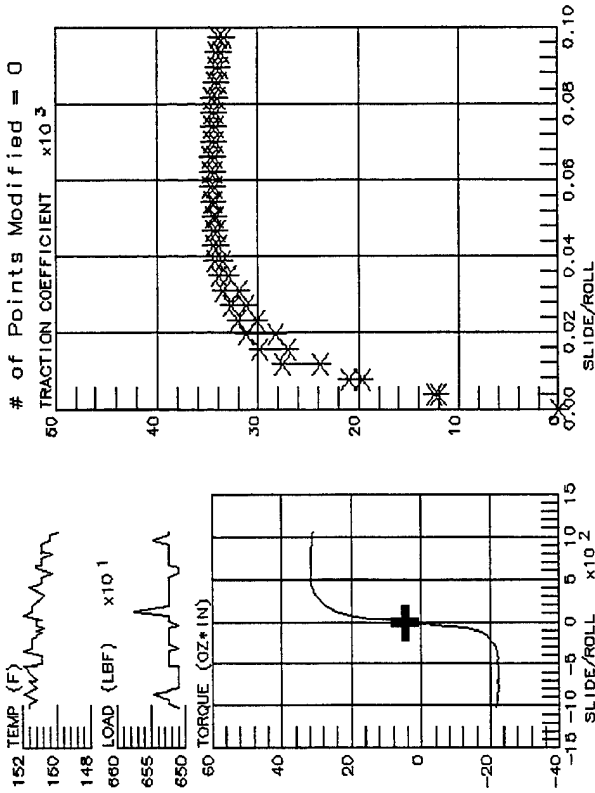
BO 81-288 ApiezonC+5%Bardhal(VacKote) #194
150F 65LBF 2546RPM 8 FILE: 81-288bo150



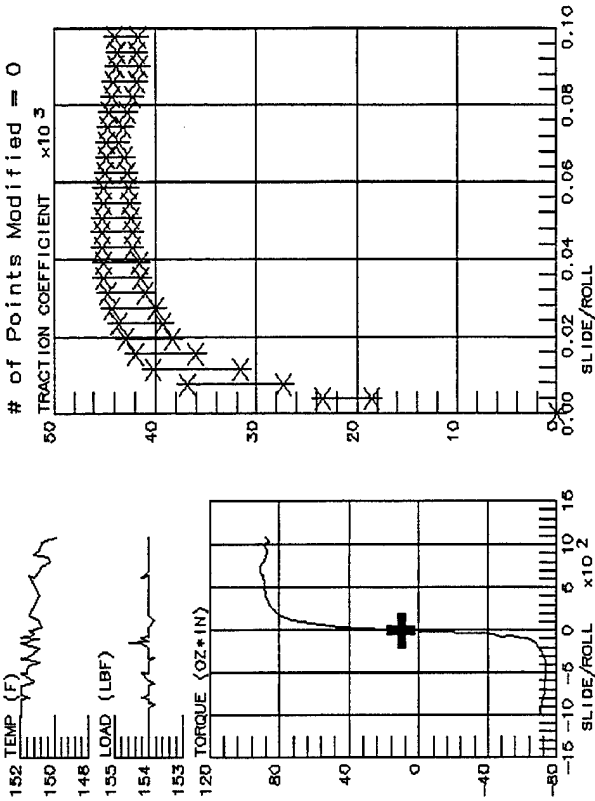
BO 81-288 ApiezonC+5%Bardhal(VacKote) #196
150F 19LBF 5093RPM 10 FILE: 81-288bo150



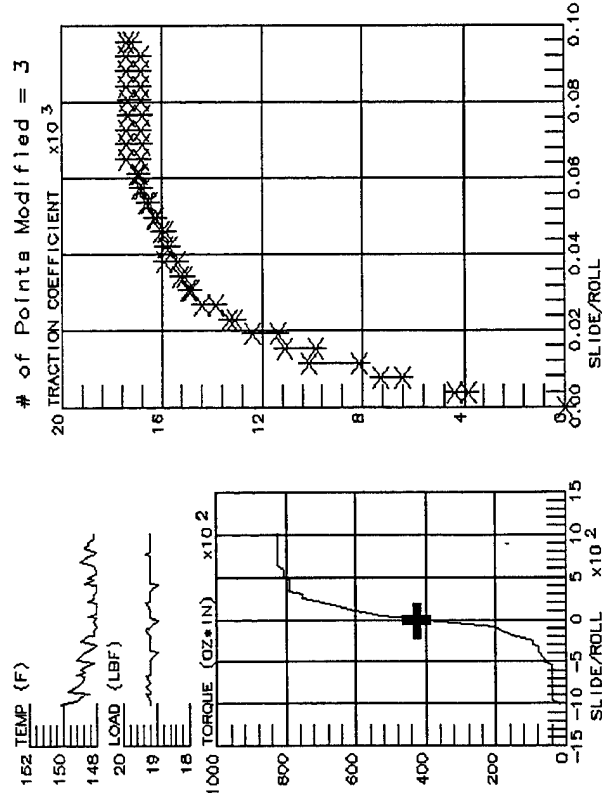
BO 81-288 ApiezonC+5%Bardhal(VacKote) #197
150F 65LBF 5093RPM 11 FILE: 81-288b0150



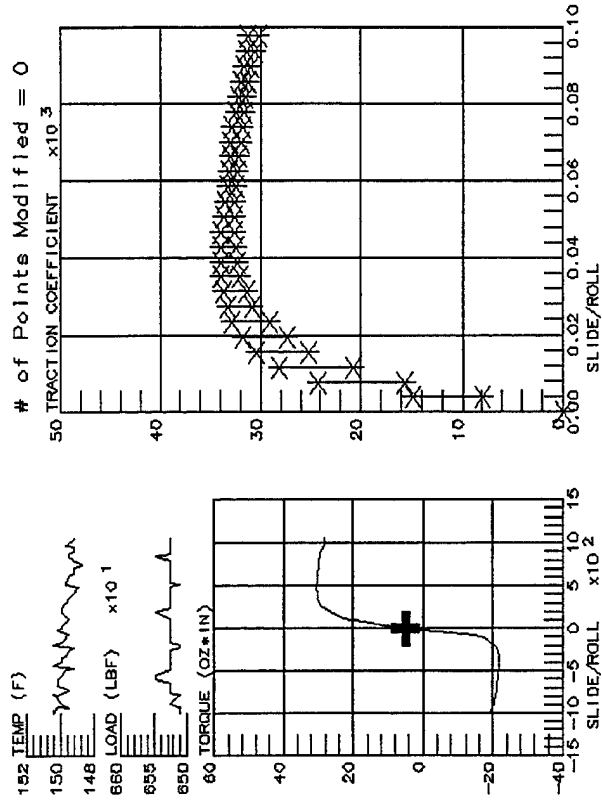
BO 81-288 ApiezonC+5%Bardhal(VacKote) #198
150F 154LBF 5093RPM 12 FILE: 81-288b0150



BO 81-288 ApiezonC+5%Bardhal(VacKote) #199
150F 19LBF 7639RPM 13 FILE: 81-288b0150

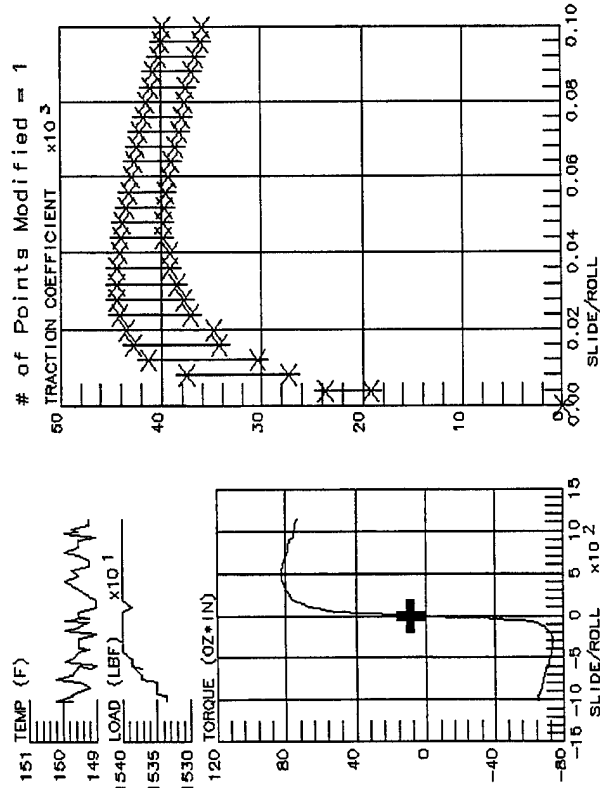


BO 81-288 ApiezonC+5%Bardhal(VacKote) #200
150F 85LBF 7639RPM 14 FILE: 81-288b0150

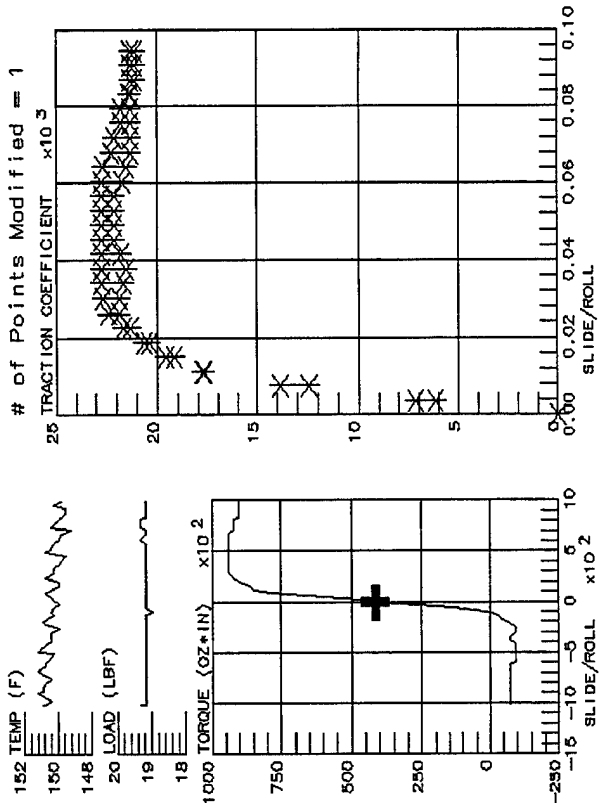


TRACTION MODELLING

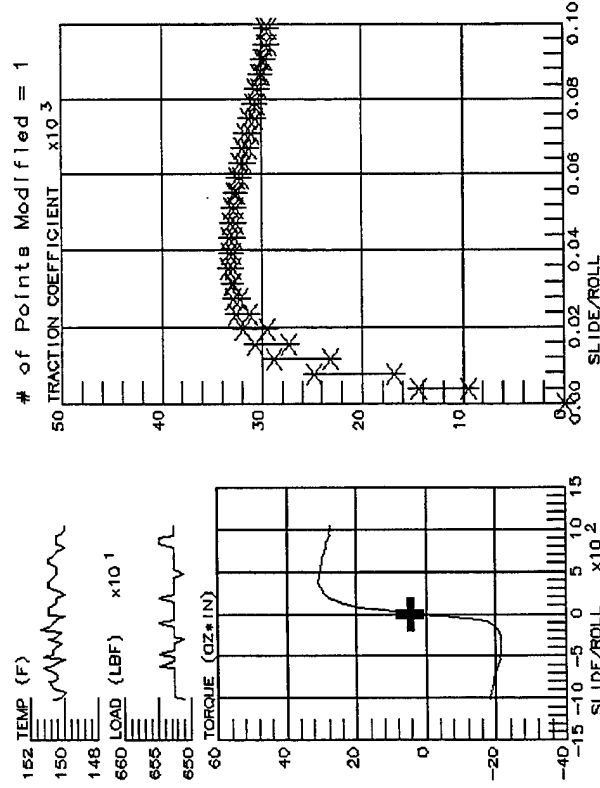
BO 81-288 ApiezonC+5%Bardhal(VacKote) #201
150F 154LBF 7639RPM 15 FILE: 81-288bo150



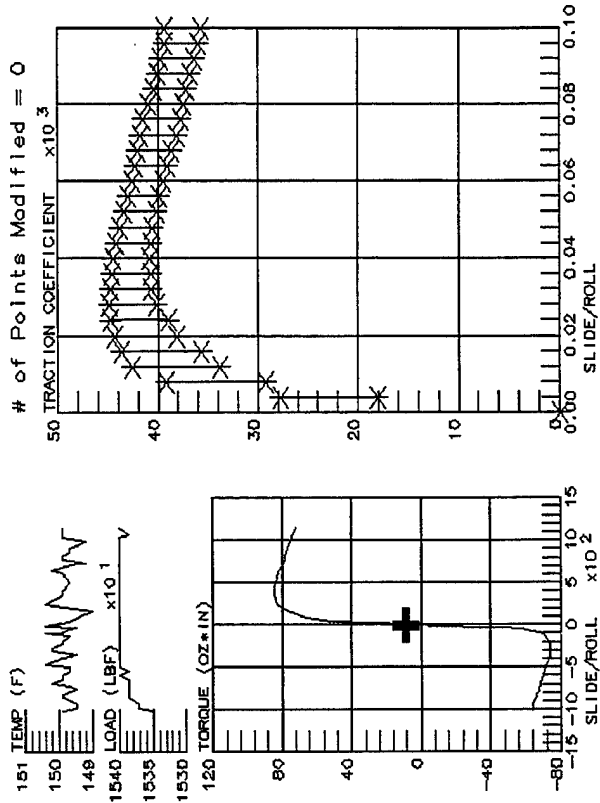
BO 81-288 ApiezonC+5%Bardhal(VacKote) #202
150F 19LBF 10186RPM 18 FILE: 81-288bo150



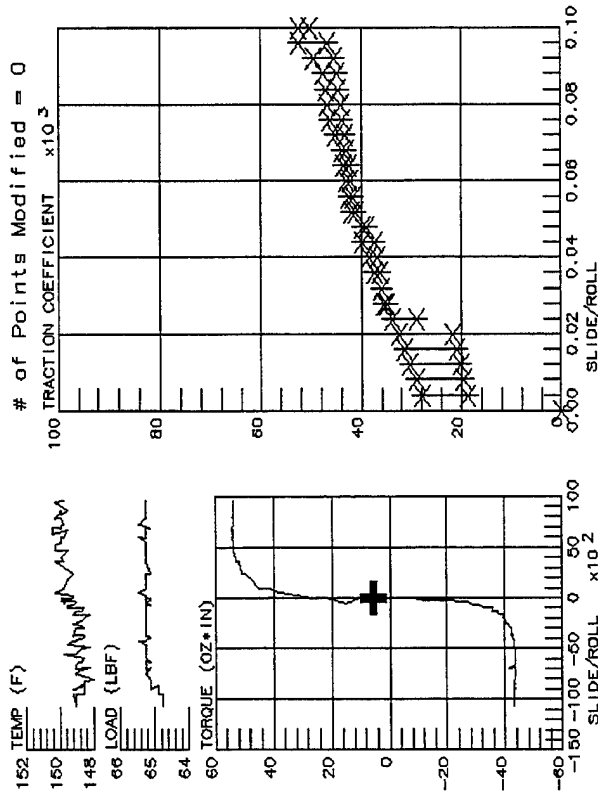
BO 81-288 ApiezonC+5%Bardhal(VacKote) #203
150F 65LBF 10186RPM 17 FILE: 81-288bo150



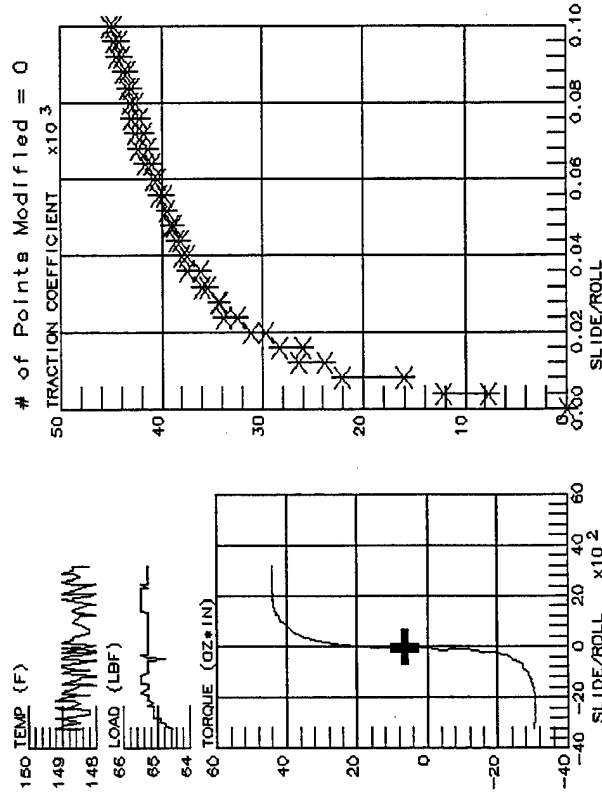
BO 81-288 ApiezonC+5%Bardhal(VacKote) #204
150F 154LBF 10186RPM 18 FILE: 81-288bo150



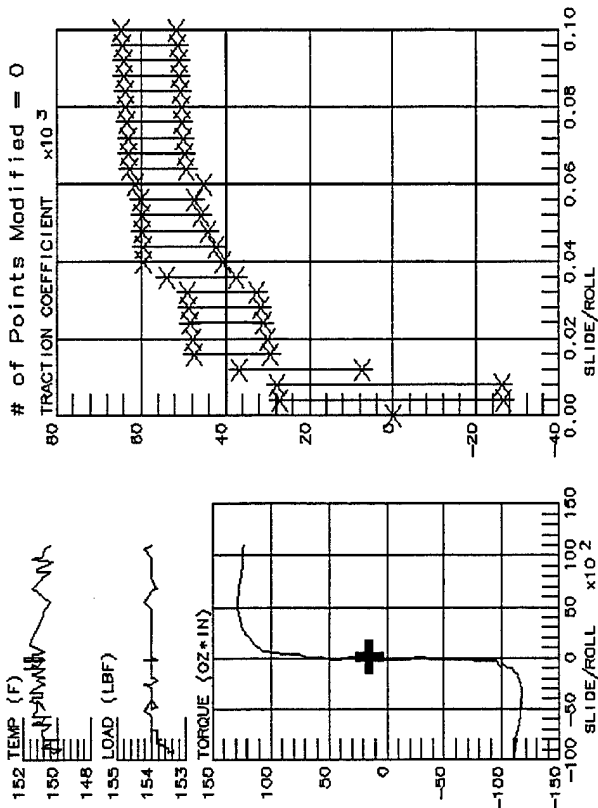
BO 81-288 ApiezonC+5%Bardhal (VacKote) #205
150F 65LBF 318RPM 1 FILE: 81-288b0150



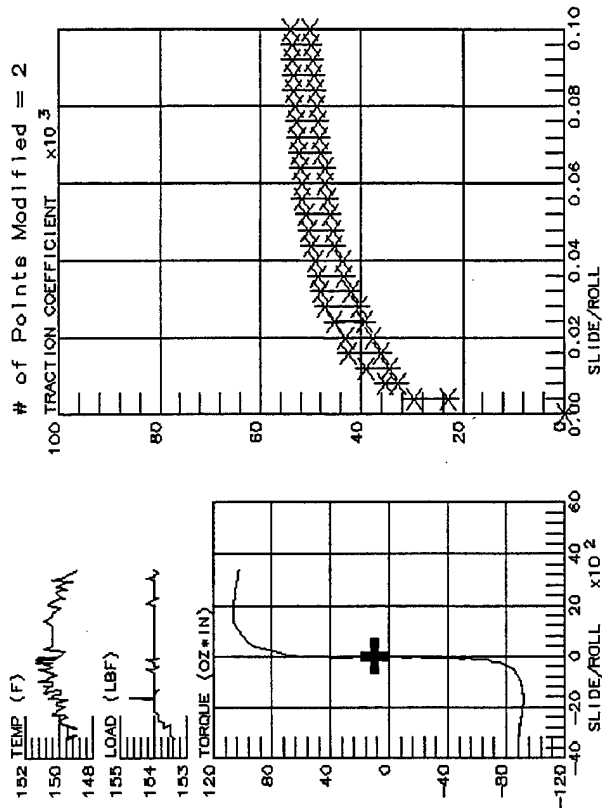
BO 81-288 ApiezonC+5%Bardhal (VacKote) #207
150F 65LBF 1273RPM 3 FILE: 81-288b0150



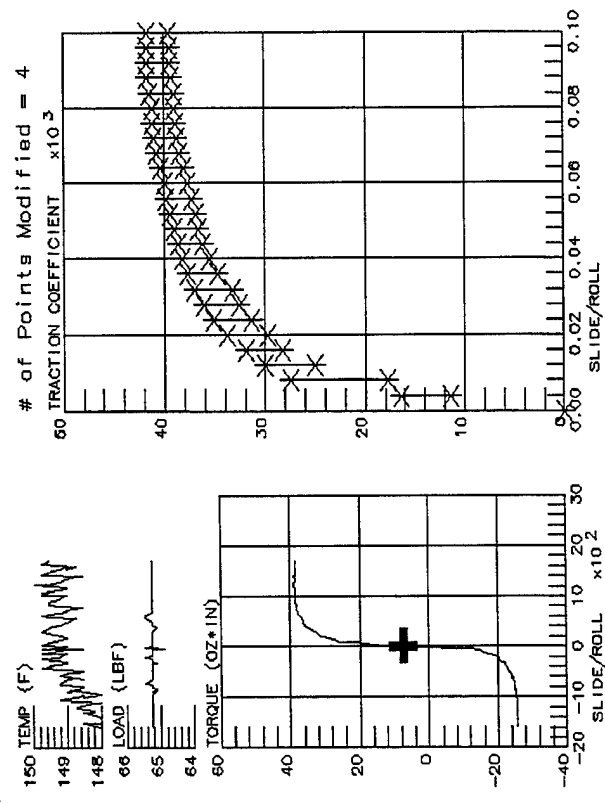
BO 81-288 ApiezonC+5%Bardhal (VacKote) #208
150F 154LBF 318RPM 2 FILE: 81-288b0150



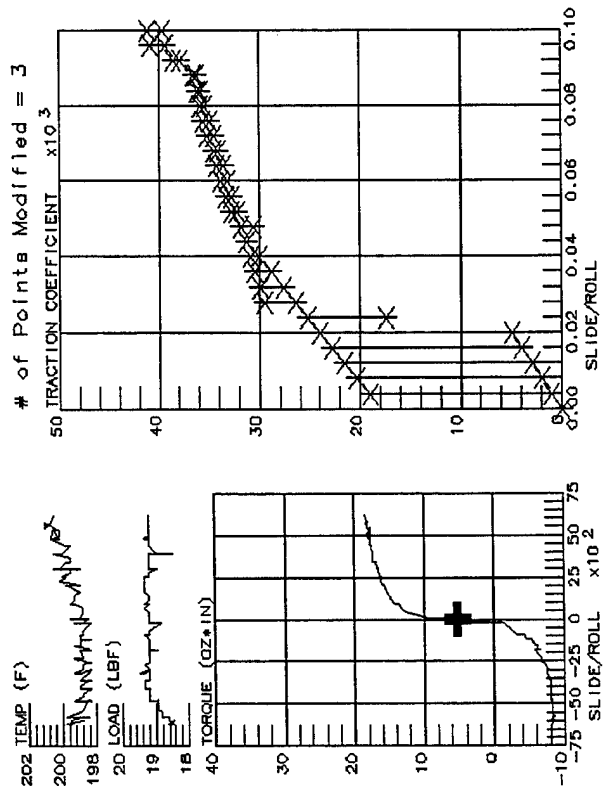
BO 81-288 ApiezonC+5%Bardhal (VacKote) #208
150F 154LBF 1273RPM 4 FILE: 81-288b0150



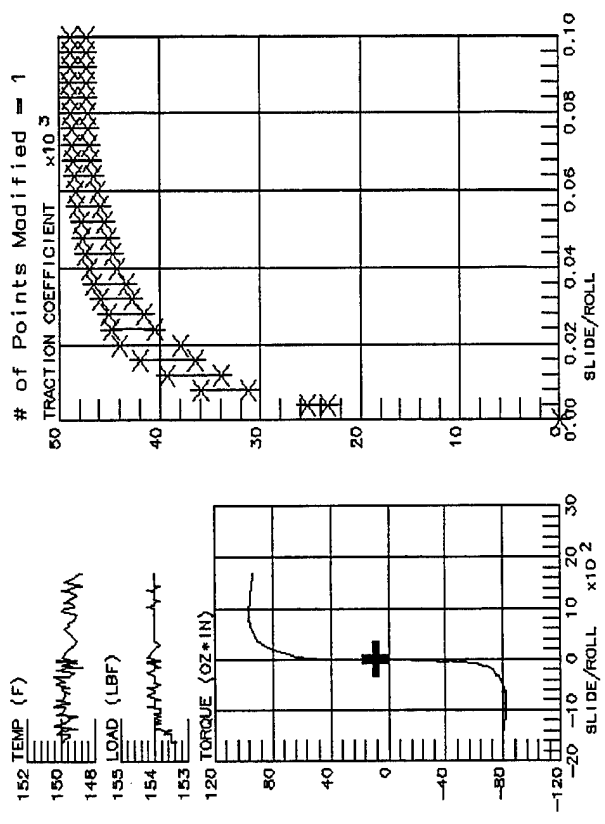
BO 81-288 ApiezonC+5%Bardhal(VacKote) #208
150F 65LBF 2546RPM 5 FILE: 81-288bo150



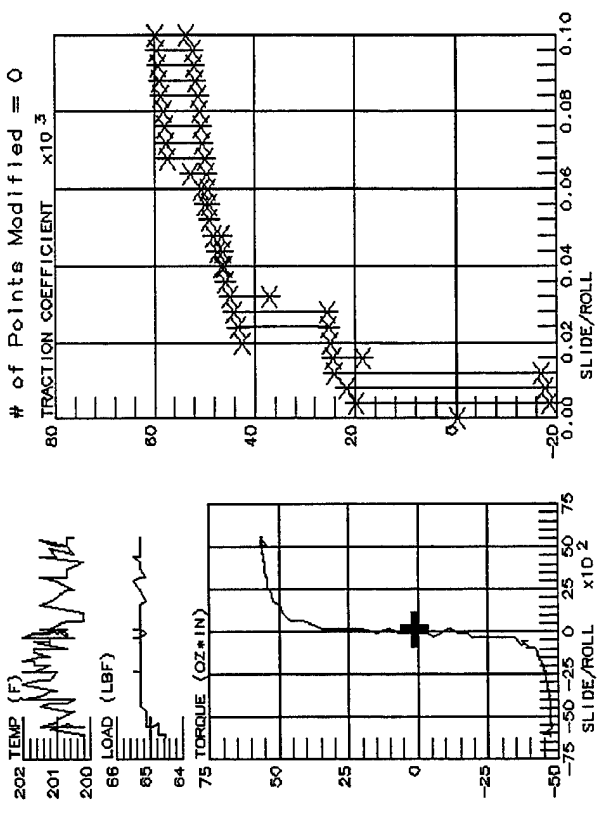
BO 81-288 ApiezonC+5%Bardhal(VacKote) #211
200F 19LBF 318RPM 1 FILE: 81-288bo200



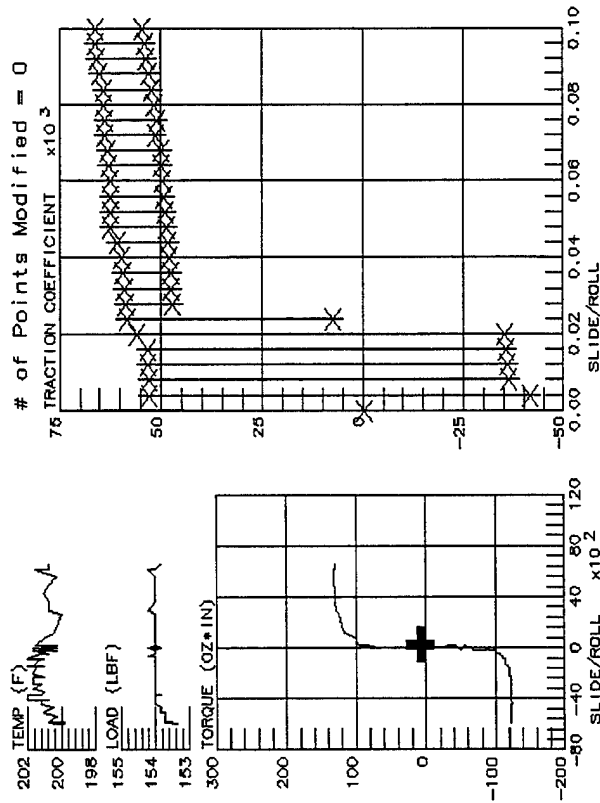
BO 81-288 ApiezonC+5%Bardhal(VacKote) #210
150F 154LBF 2546RPM 6 FILE: 81-288bo150



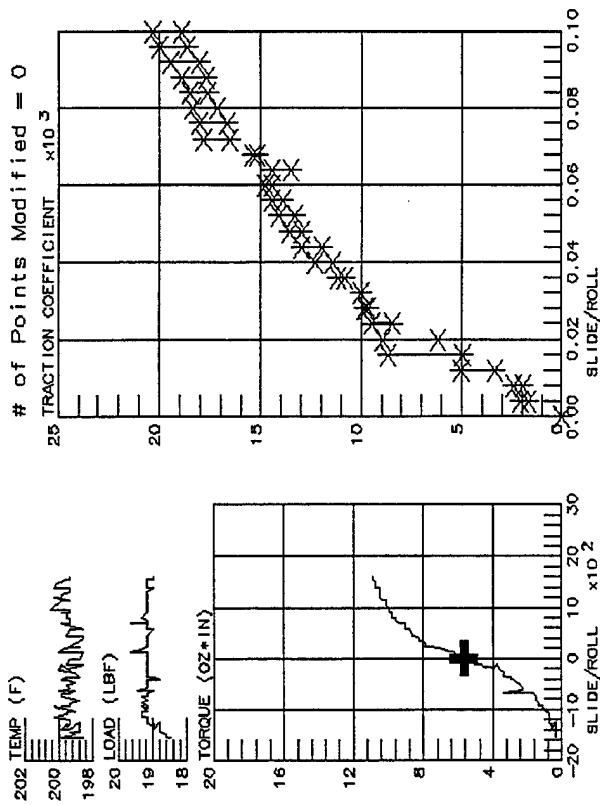
BO 81-288 ApiezonC+5%Bardhal(VacKote) #212
200F 65LBF 318RPM 2 FILE: 81-288bo200



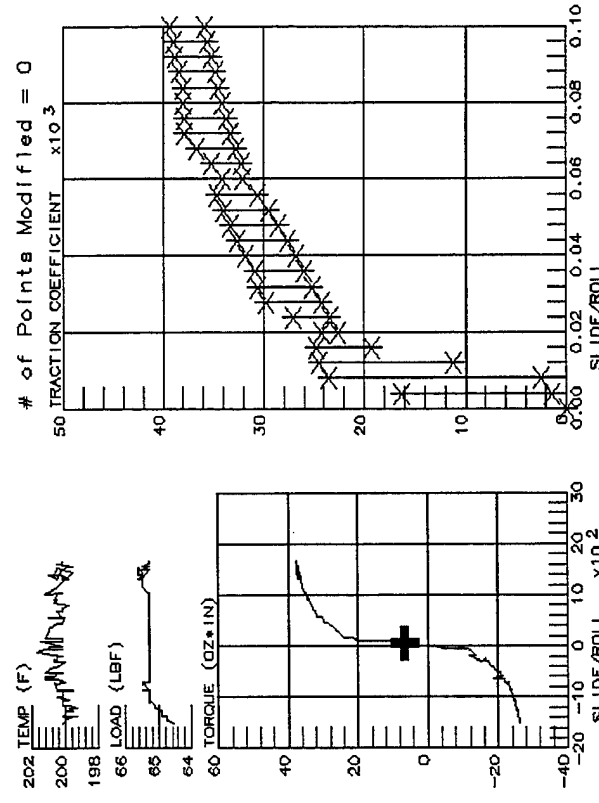
BO 81-288 ApiezonC+5%Bardhal (VacKote) #213
200F 154LBF 318RPM 3 FILE: 81-288bo200



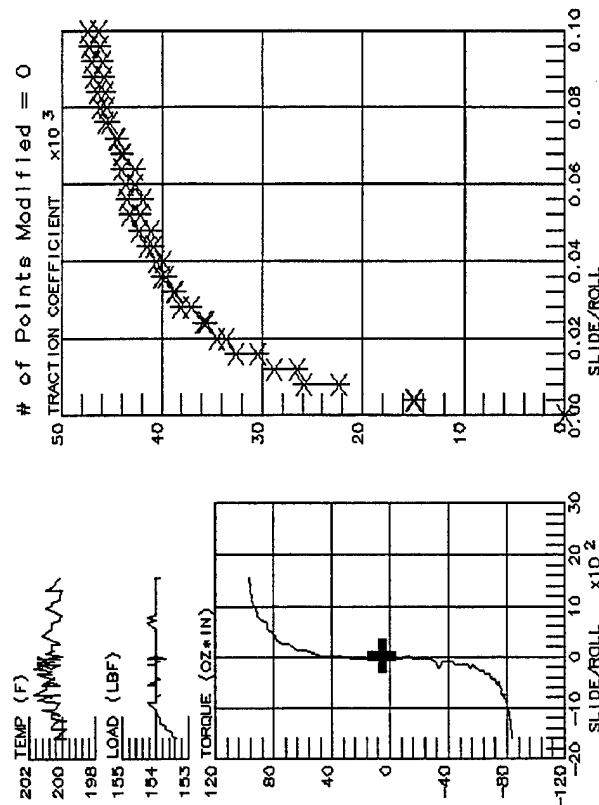
BO 81-288 ApiezonC+5%Bardhal (VacKote) #214
200F 19LBF 1273RPM 4 FILE: 81-288bo200



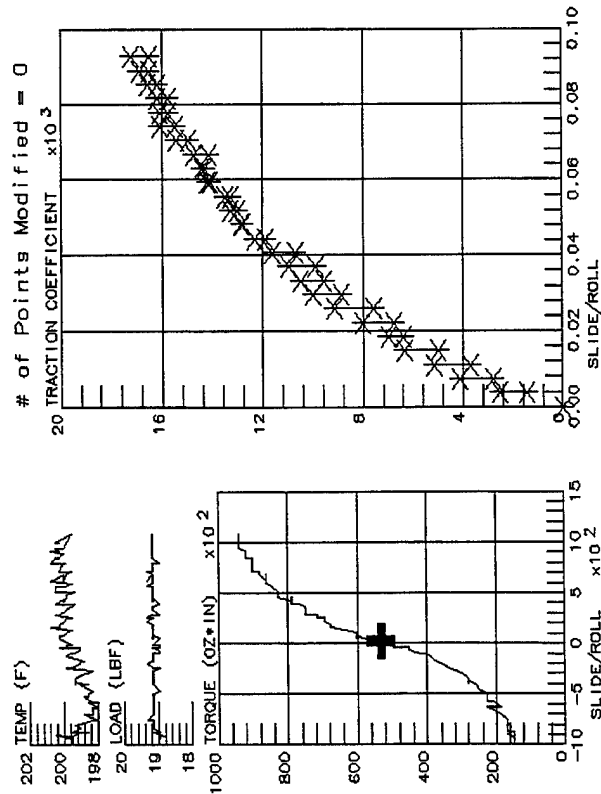
BO 81-288 ApiezonC+5%Bardhal (VacKote) #215
200F 65LBF 1273RPM 5 FILE: 81-288bo200



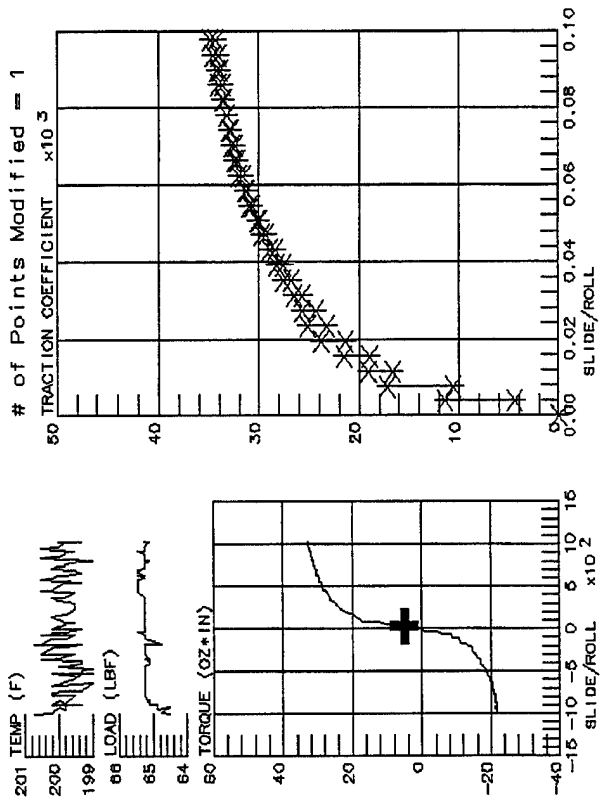
BO 81-288 ApiezonC+5%Bardhal (VacKote) #216
200F 154LBF 1273RPM 6 FILE: 81-288bo200



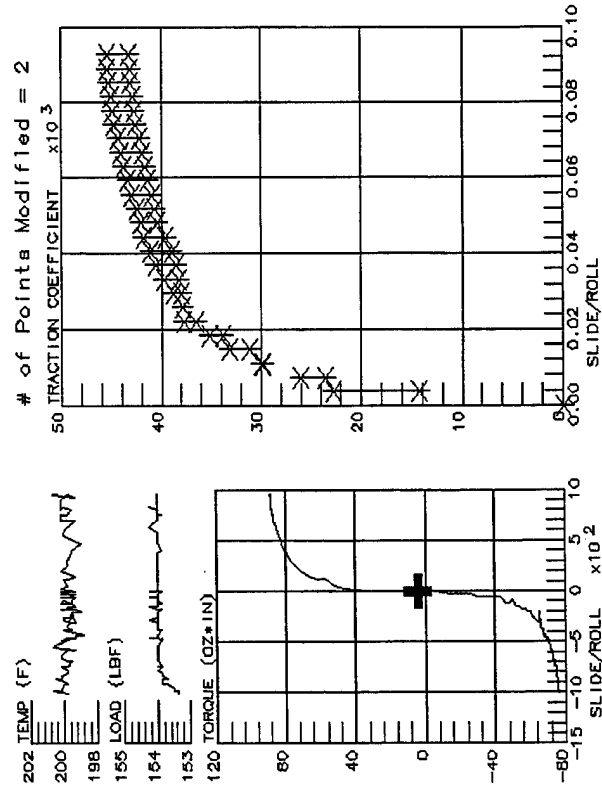
BO 81-288 ApiezonC+5%Bardhal(Vackote) #217
200F 19LBF 2546RPM 7 FILE: 81-288bc200



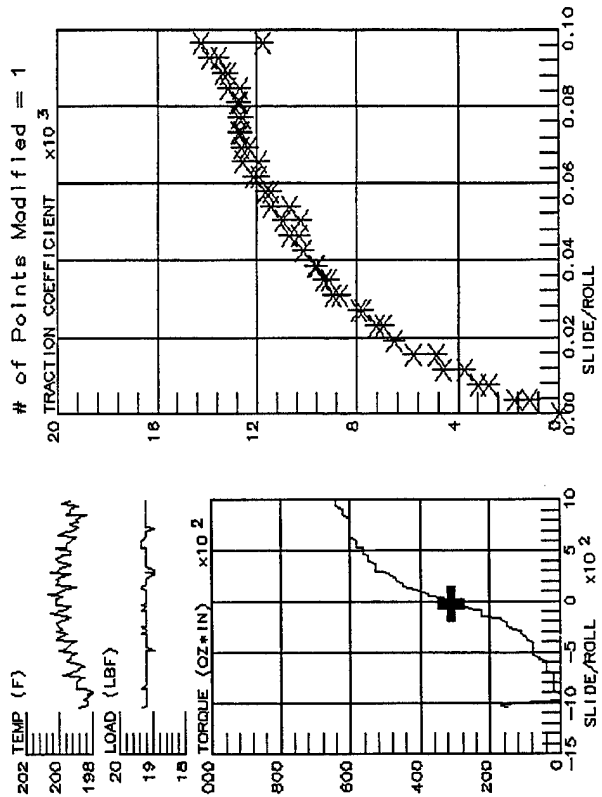
BO 81-288 ApiezonC+5%Bardhal(Vackote) #218
200F 65LBF 2546RPM 8 FILE: 81-288bc200



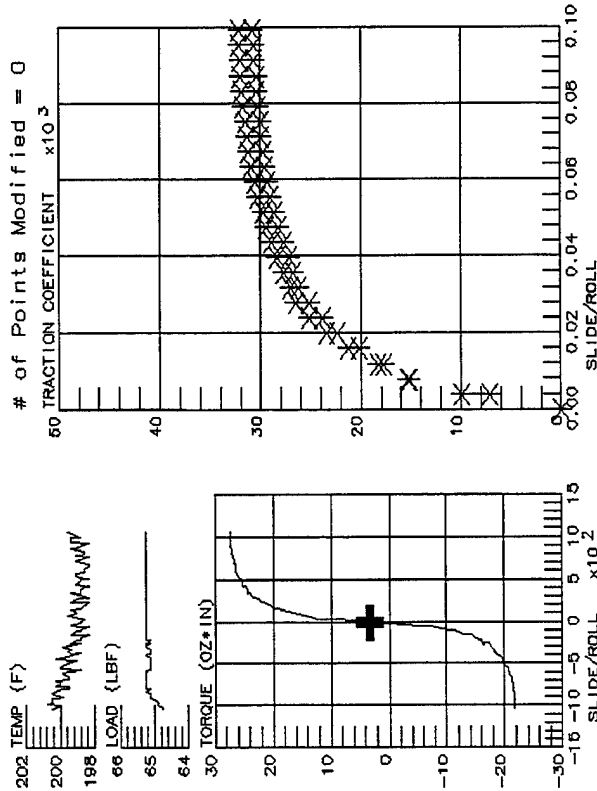
BO 81-288 ApiezonC+5%Bardhal(Vackote) #219
200F 154LBF 2546RPM 9 FILE: 81-288bc200



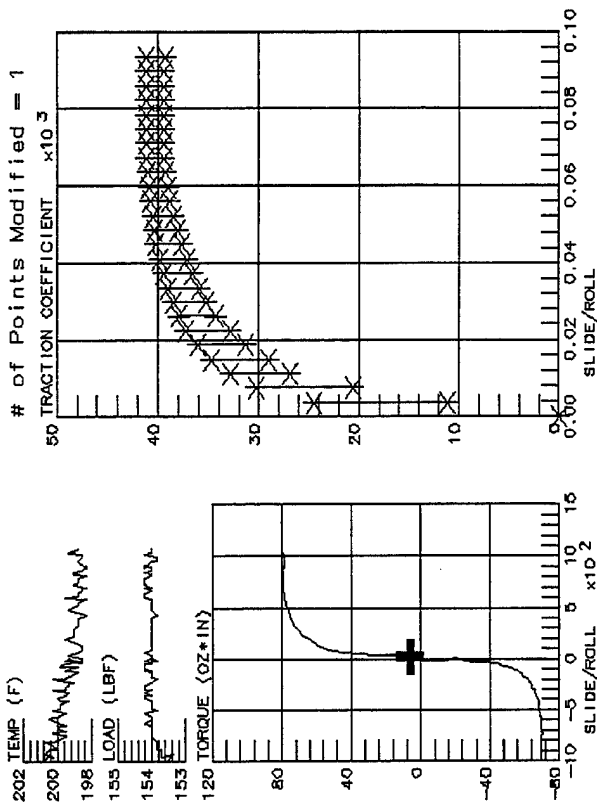
BO 81-288 ApiezonC+5%Bardhal(Vackote) #220
200F 19LBF 5093RPM 10 FILE: 81-288bc200



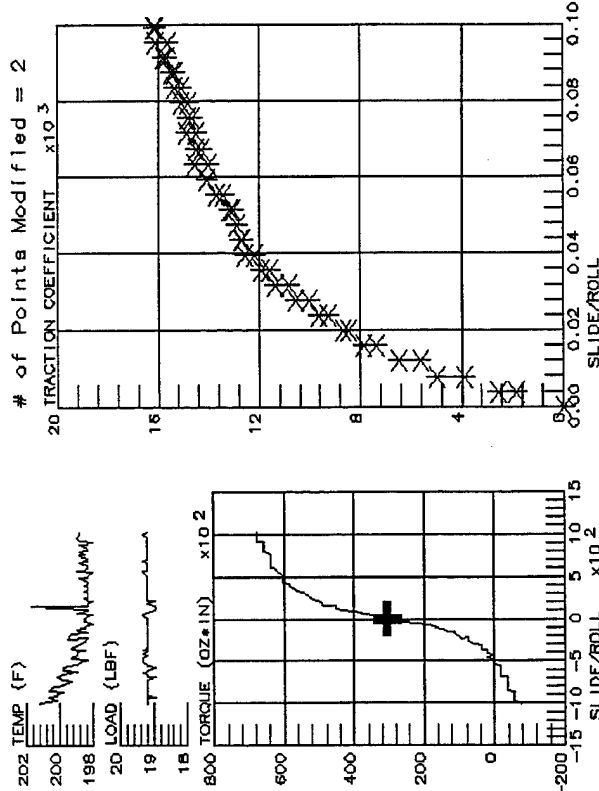
BO 81-288 ApiezonC+5%Bardhal (VacKote) #221
200F 65LBF 5093RPM 11 FILE: 81-288bo200



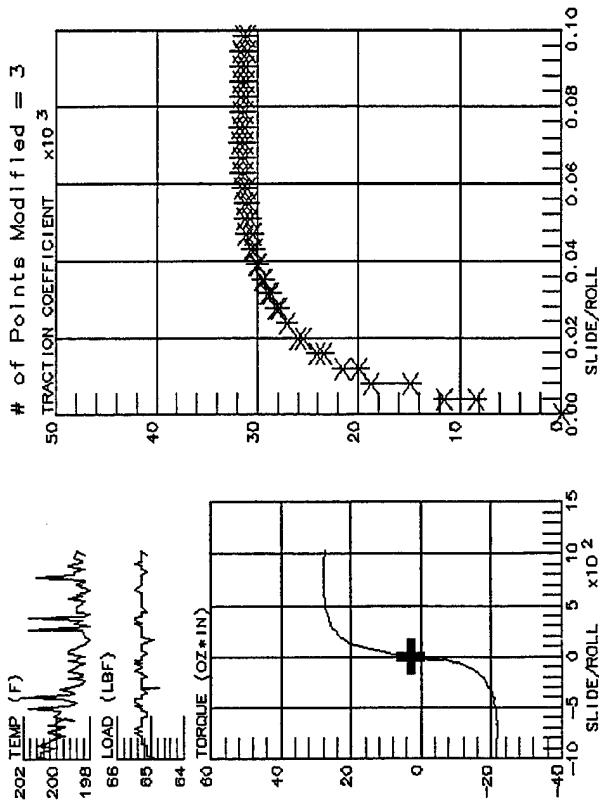
BO 81-288 ApiezonC+5%Bardhal (VacKote) #222
200F 164LBF 5093RPM 12 FILE: 81-288bo200



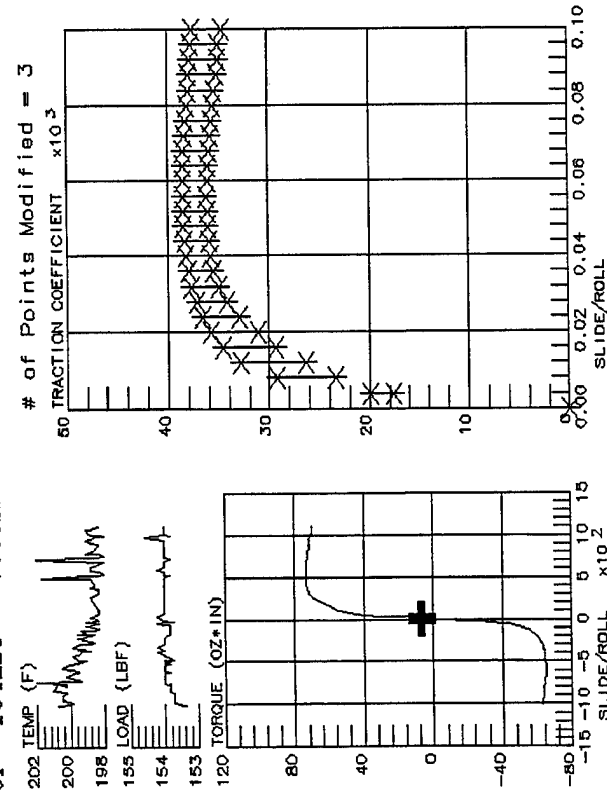
BO 81-288 ApiezonC+5%Bardhal (VacKote) #223
200F 19LBF 7639RPM 13 FILE: 81-288bo200



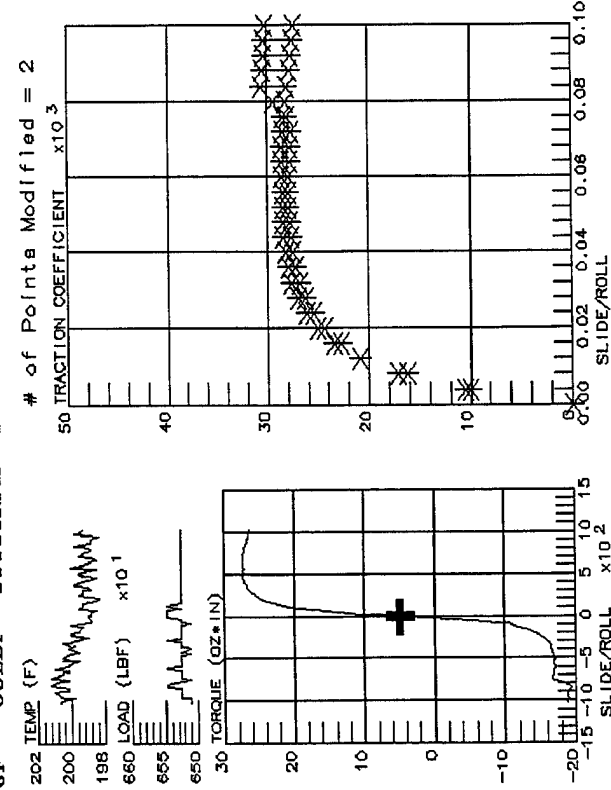
BO 81-288 ApiezonC+5%Bardhal (VacKote) #224
200F 65LBF 7639RPM 14 FILE: 81-288bo200



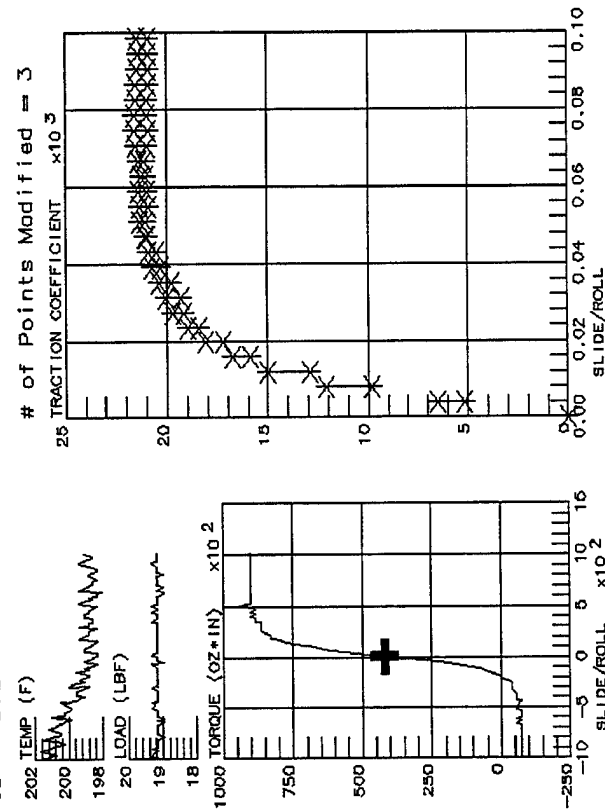
BO 81-288 ApiezonC+5%Bardhal(VacKote) #226
200F 154LBF 7639RPM 15 FILE: 81-288bo200



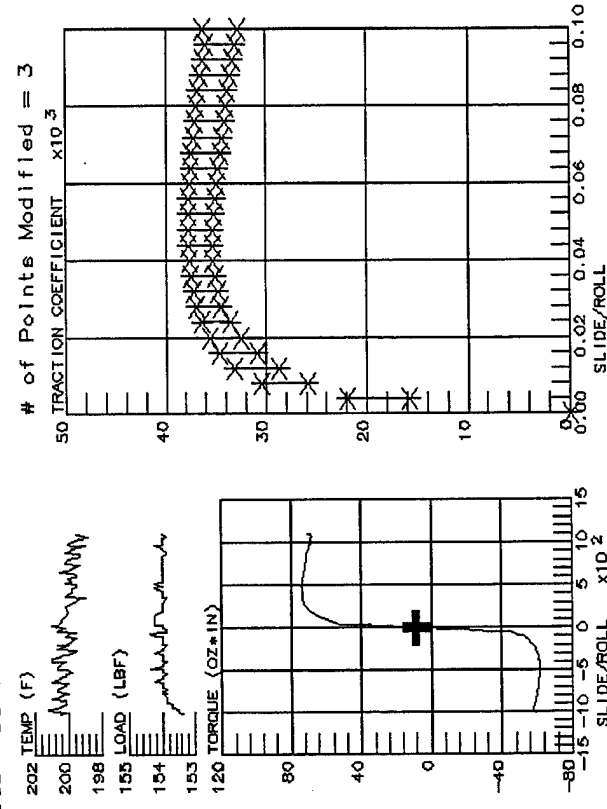
BO 81-288 ApiezonC+5%Bardhal(VacKote) #227
200F 65LBF 10186RPM 17 FILE: 81-288bo200



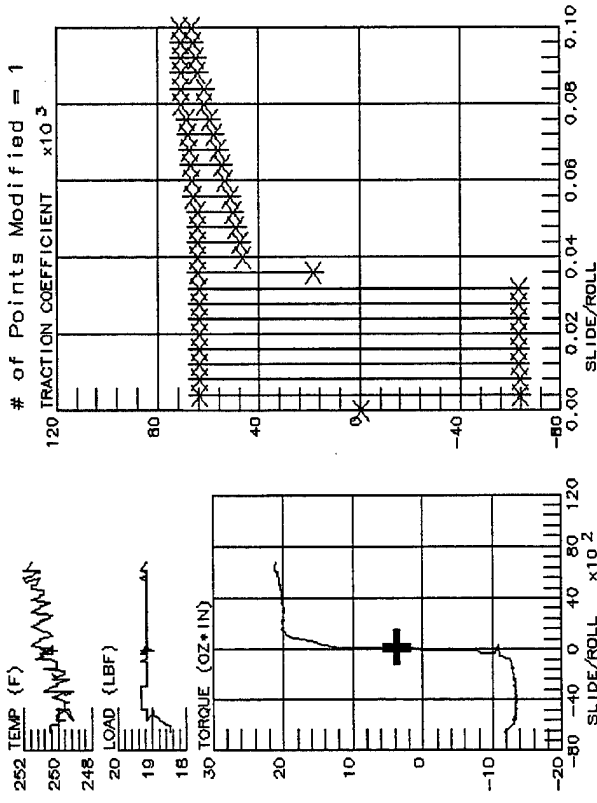
BO 81-288 ApiezonC+5%Bardhal(VacKote) #228
200F 19LBF 10186RPM 18 FILE: 81-288bo200



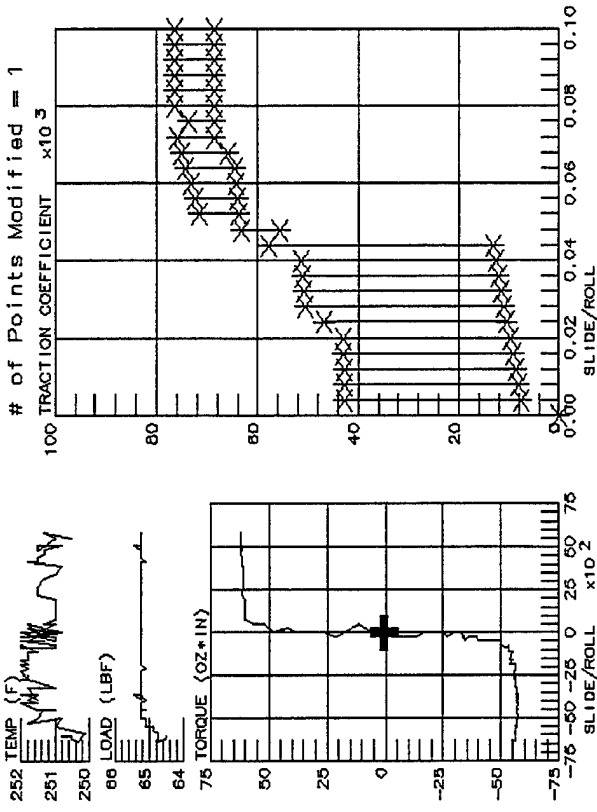
BO 81-288 ApiezonC+5%Bardhal(VacKote) #238
200F 154LBF 10186RPM 18 FILE: 81-288bo200



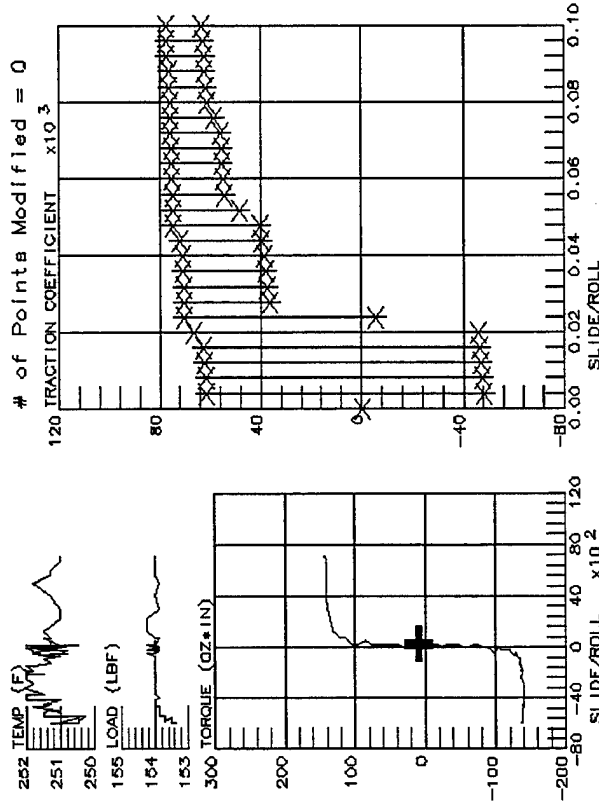
BO 81-288 ApiezonC+5%Bardhal (VacKote) #229
250F 19LBF 318RPM 1 FILE: 81-288bo250



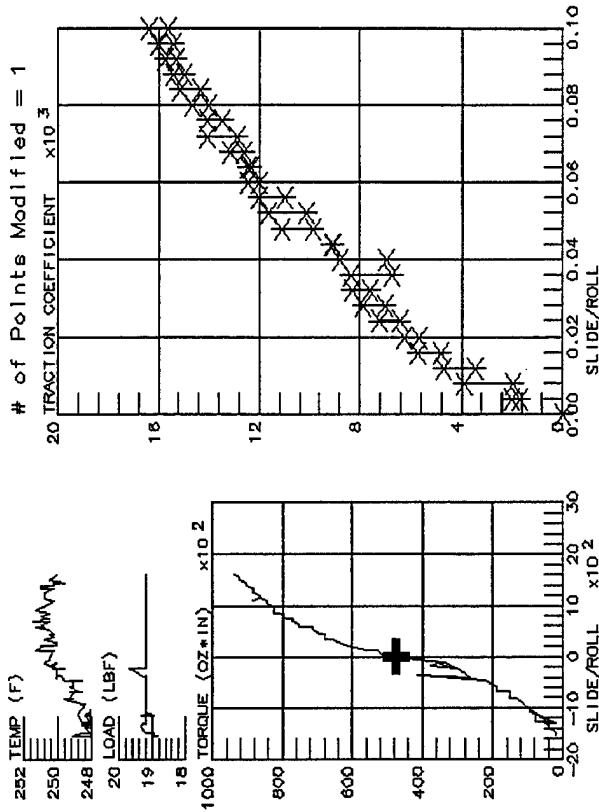
BO 81-288 ApiezonC+5%Bardhal (VacKote) #230
250F 65LBF 318RPM 2 FILE: 81-288bo250



BO 81-288 ApiezonC+5%Bardhal (VacKote) #231
250F 154LBF 318RPM 3 FILE: 81-288bo250

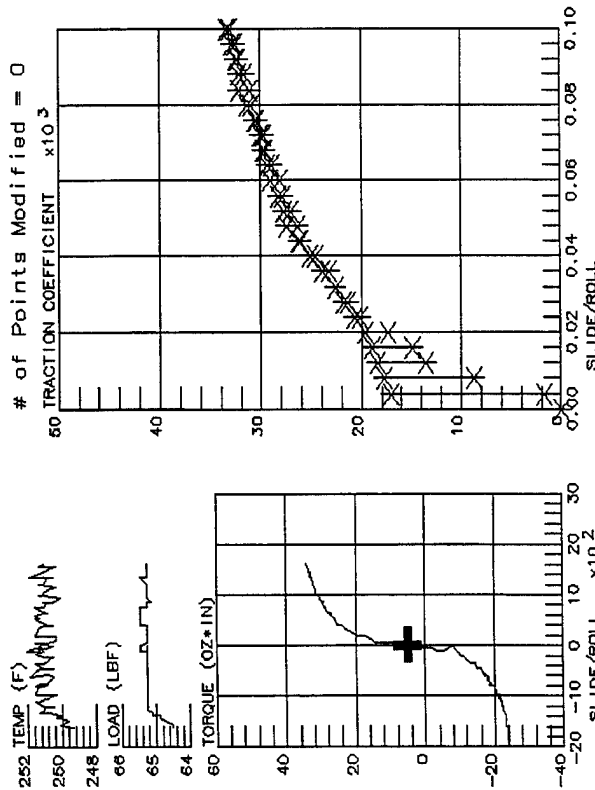


BO 81-288 ApiezonC+5%Bardhal (VacKote) #232
250F 19LBF 1273RPM 4 FILE: 81-288bo250



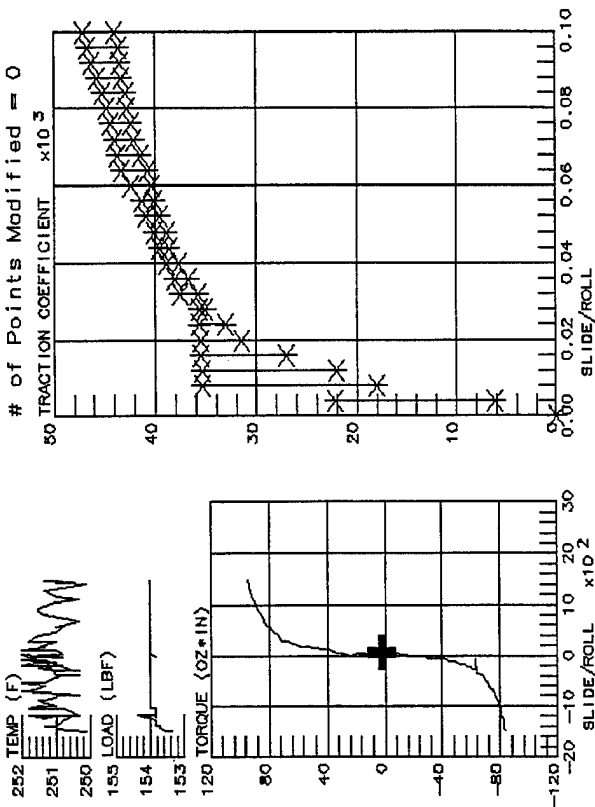
BO 81-288 ApiezonC+5%Bardhal(VacKote) #233
250F 65LBF 1273RPM 5 FILE: 81-288bo250

of Points Modified = 0



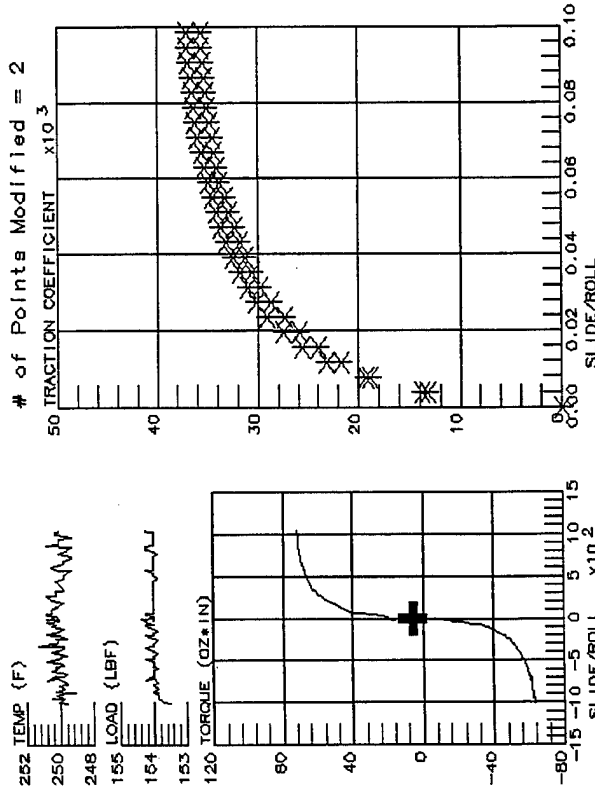
BO 81-288 ApiezonC+5%Bardhal(VacKote) #234
250F 154LBF 1273RPM 6 FILE: 81-288bo250

of Points Modified = 0



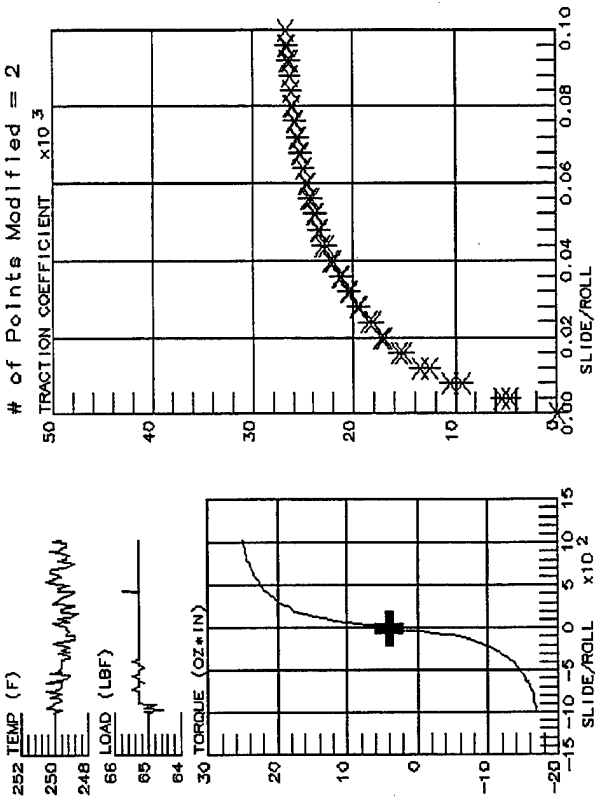
BO 81-288 ApiezonC+5%Bardhal(VacKote) #235
250F 154LBF 5093RPM 12 FILE: 81-288bo250

of Points Modified = 2



BO 81-288 ApiezonC+5%Bardhal(VacKote) #236
250F 65LBF 7639RPM 14 FILE: 81-288bo250

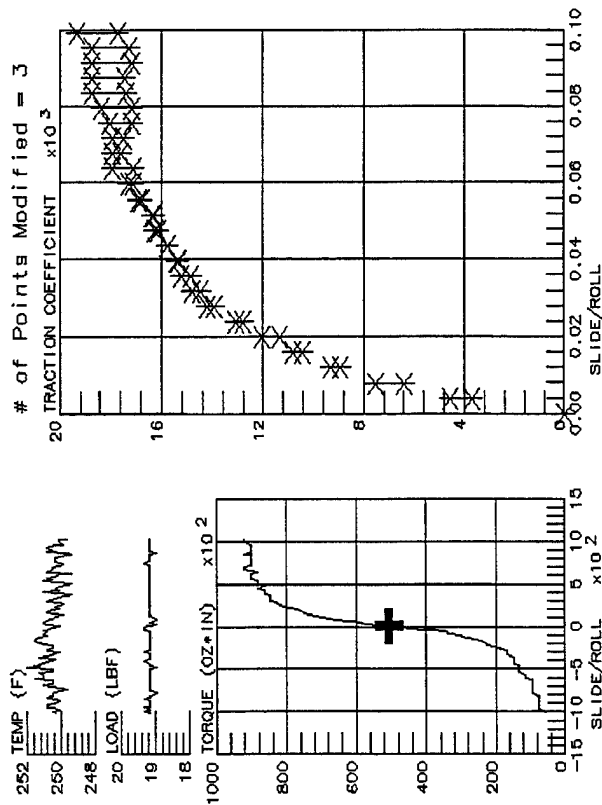
of Points Modified = 2



311133064 1491130588

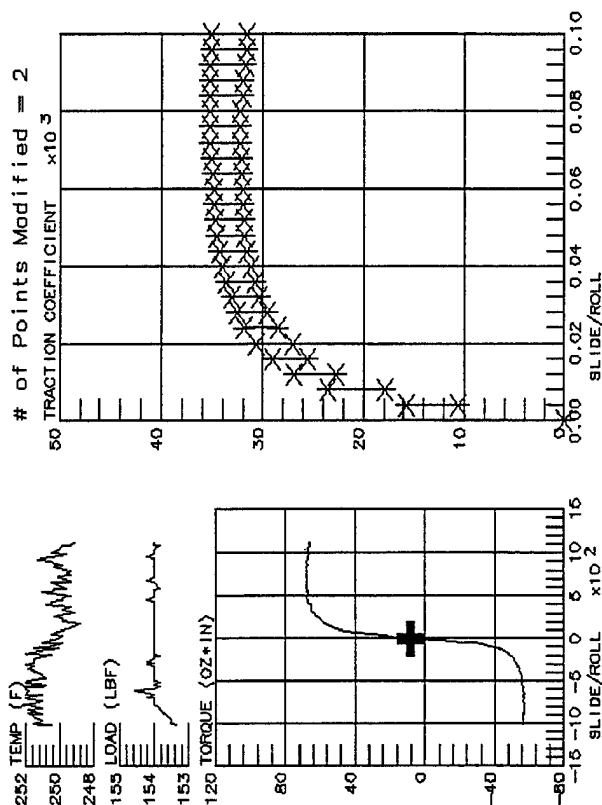
HO 81-288 ApiezonC+5%Bardhal(VacKote) #237
250F 19LBF 10186RPM 16 FILE: 81-288b0250

of Points Modified = 3



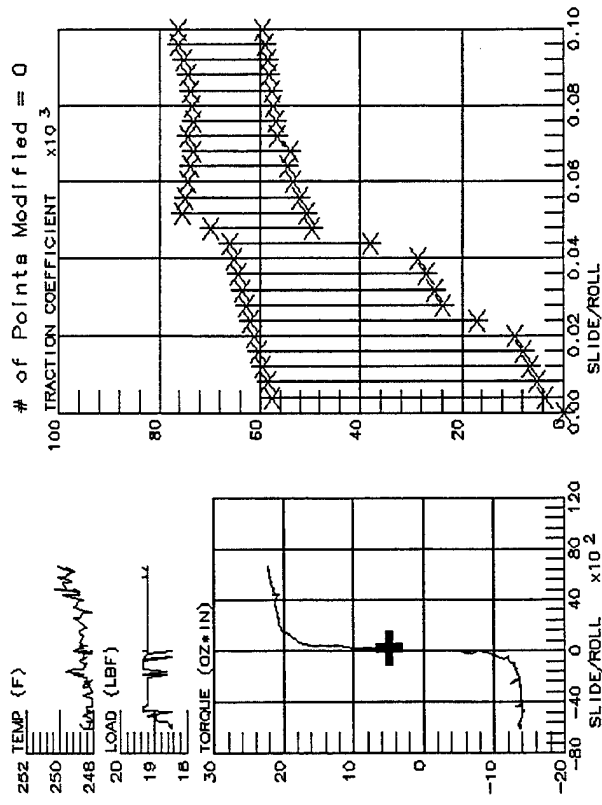
BO 81-288 ApiezonC+5%Bardhal(Vackote) #238
250F 154LEF 10186RPM 18 FILE: 81-288b0250

of Points Modified = 2



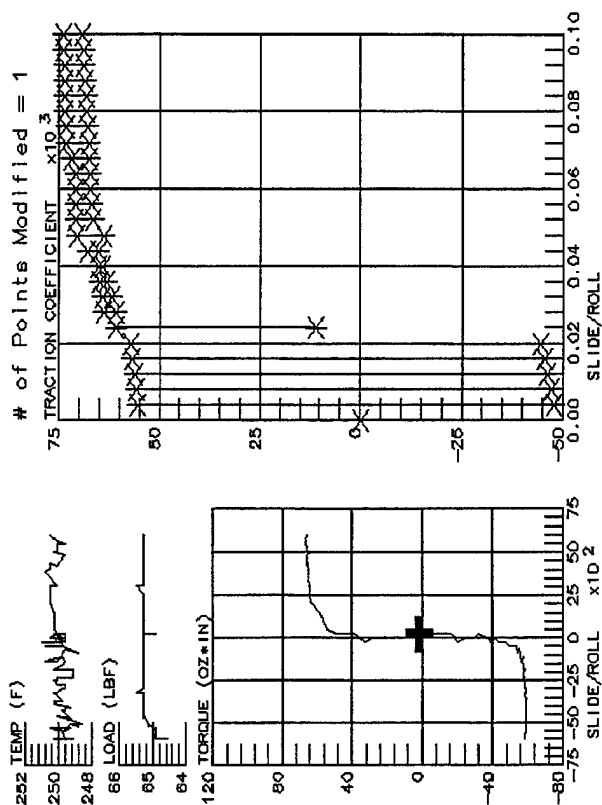
BO 81-288 ApiezonC+5%Bardhal(VacKote) #239
250F 19LBF 318RPM 1 FILE: 81-288b0250

of Points Modified = 0

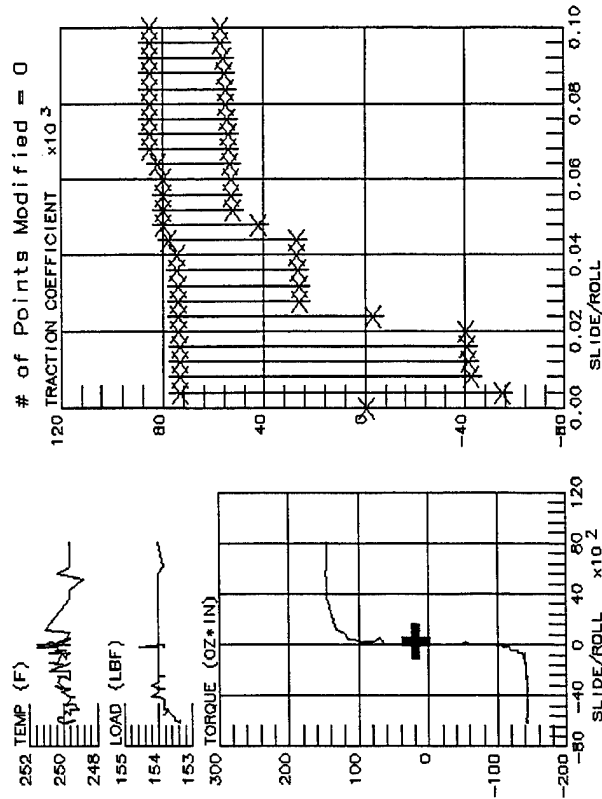


BO 81-288 ApiezonC+5%Barthal(VacKote) #240
250F 85LBF 318RPM 2 FILE: 81-288b0250

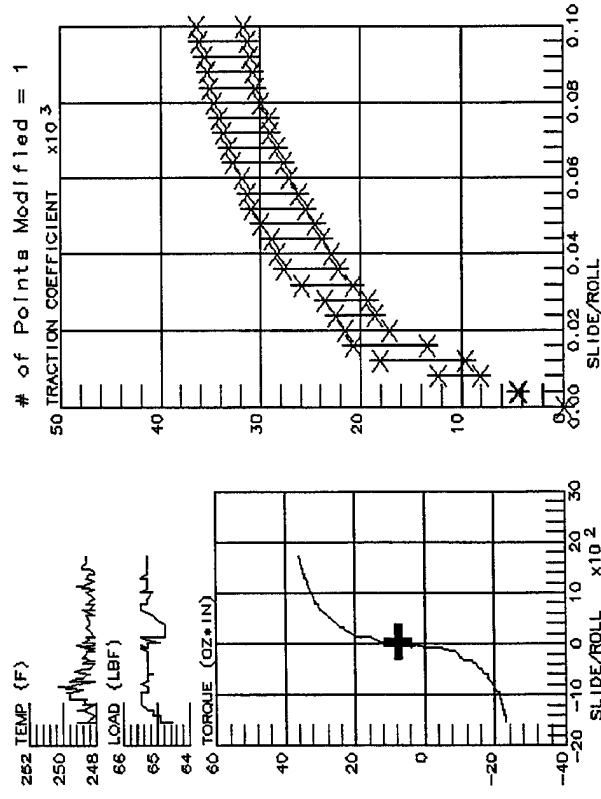
of Points Modified = 1



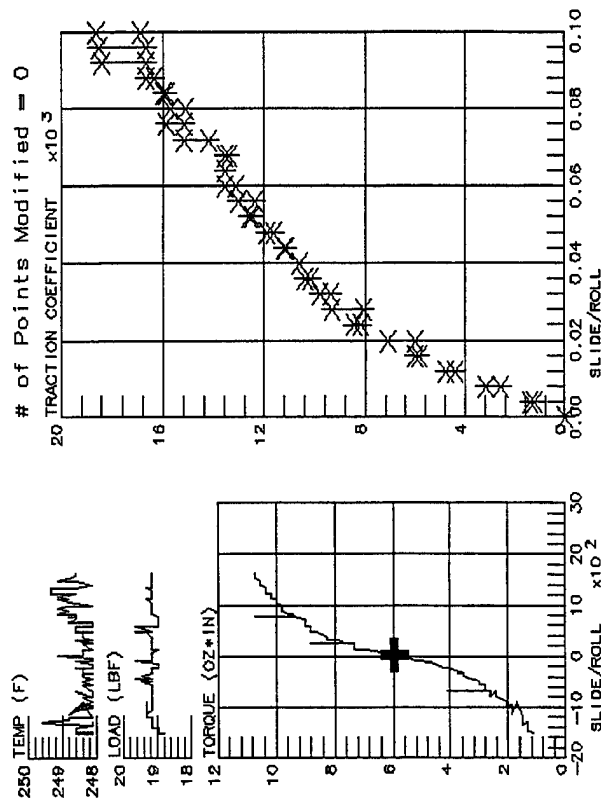
BO 81-288 ApiezonC+5%Bardhal(VacKote) #241
250F 154LBF 318RPM 3 FILE: 81-288bo250



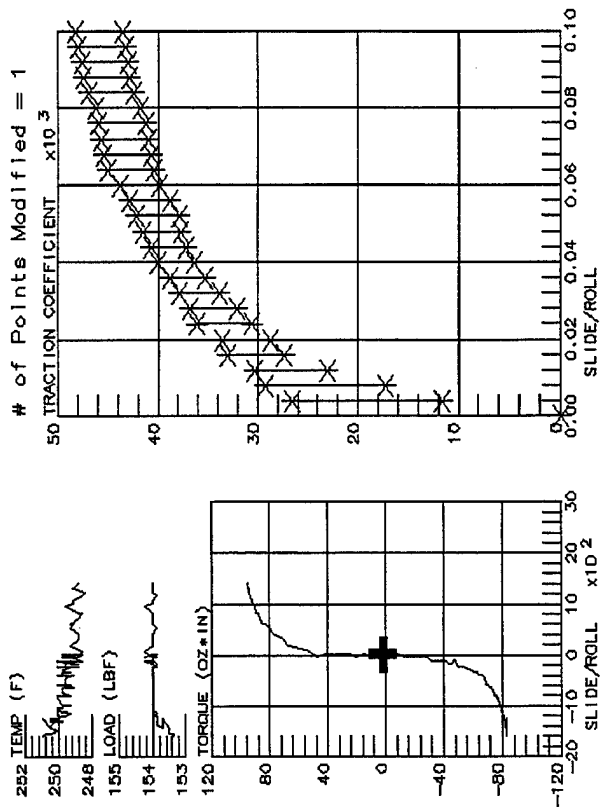
BO 81-288 ApiezonC+5%Bardhal(VacKote) #243
250F 651LBF 1273RPM 5 FILE: 81-288bo250



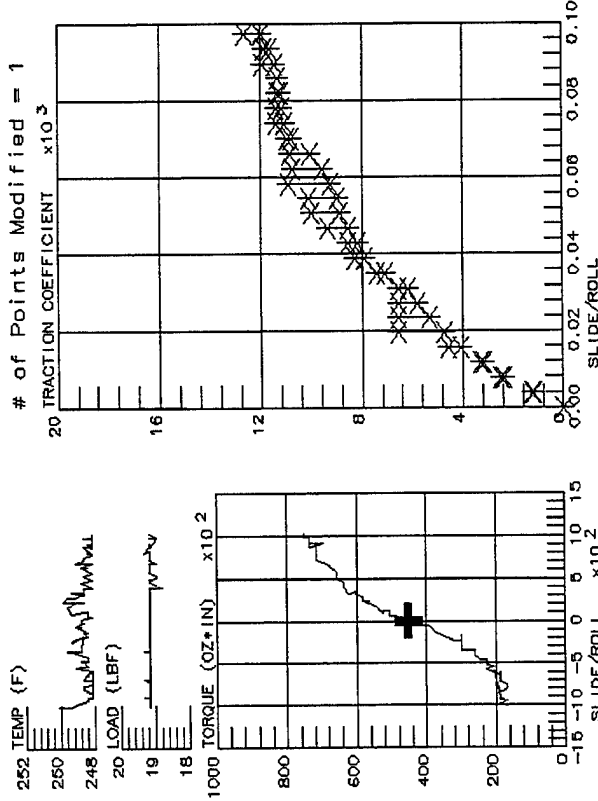
BO 81-288 ApiezonC+5%Bardhal(VacKote) #242
250F 19LBF 1273RPM 4 FILE: 81-288bo250



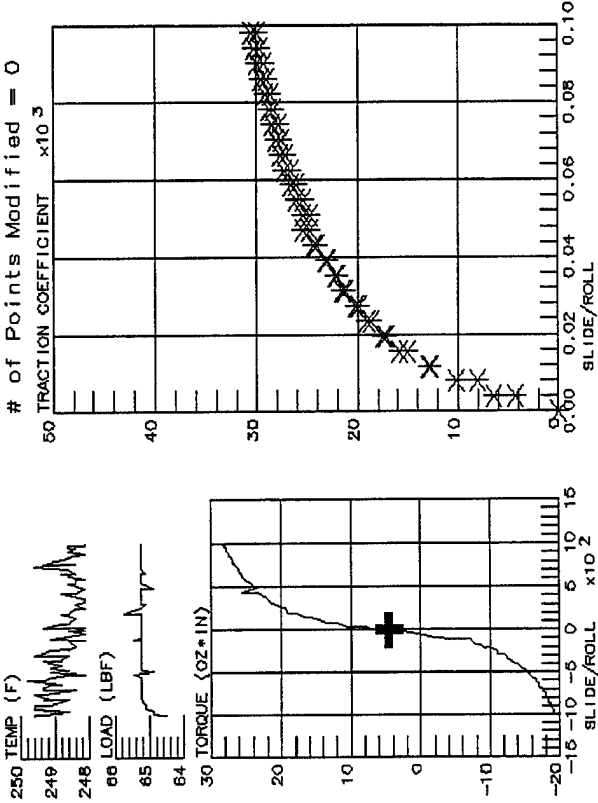
BO 81-288 ApiezonC+5%Bardhal(VacKote) #244
250F 154LBF 1273RPM 6 FILE: 81-288bo250



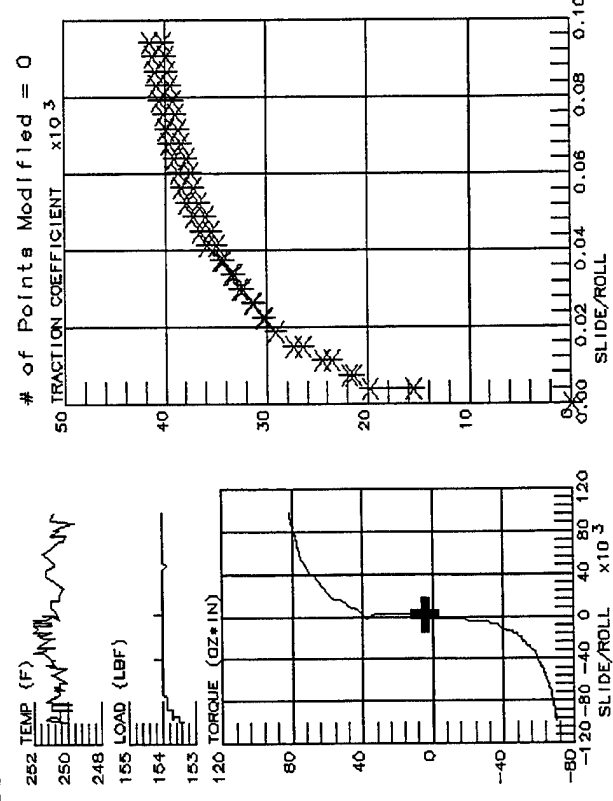
BO 81-288 ApiezonC+5%Bardhal(VacKote) #246
250F 19LBF 2546RPM 7 FILE: 81-288bo250



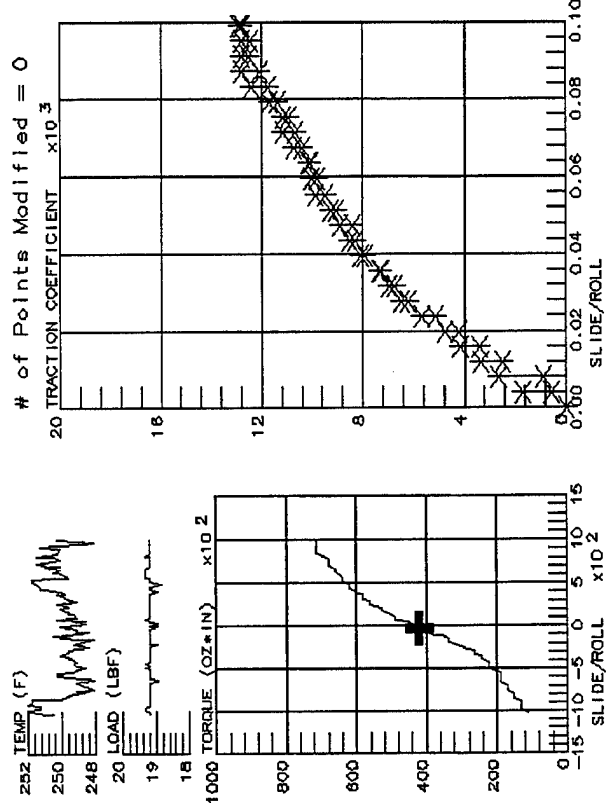
BO 81-288 ApiezonC+5%Bardhal(VacKote) #246
250F 65LBF 2546RPM 8 FILE: 81-288bo250



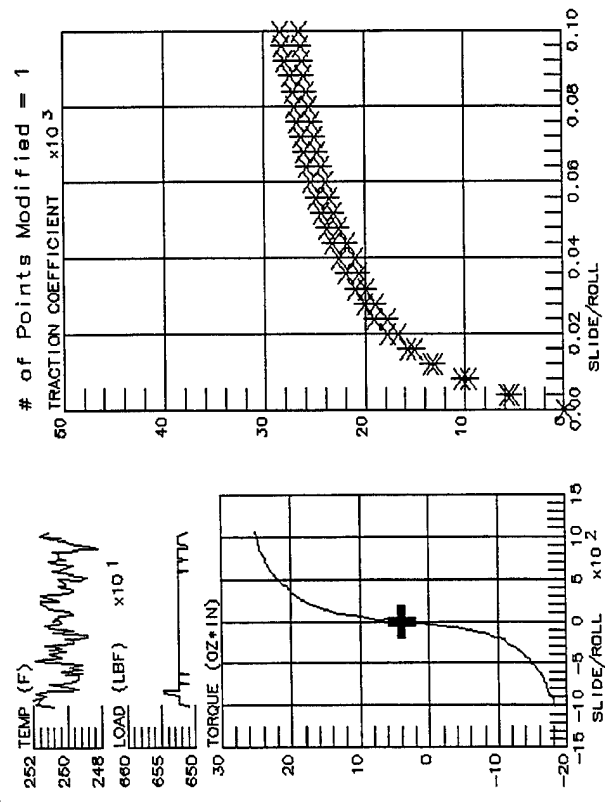
BO 81-288 ApiezonC+5%Bardhal(VacKote) #247
250F 154LBF 2546RPM 9 FILE: 81-288bo250



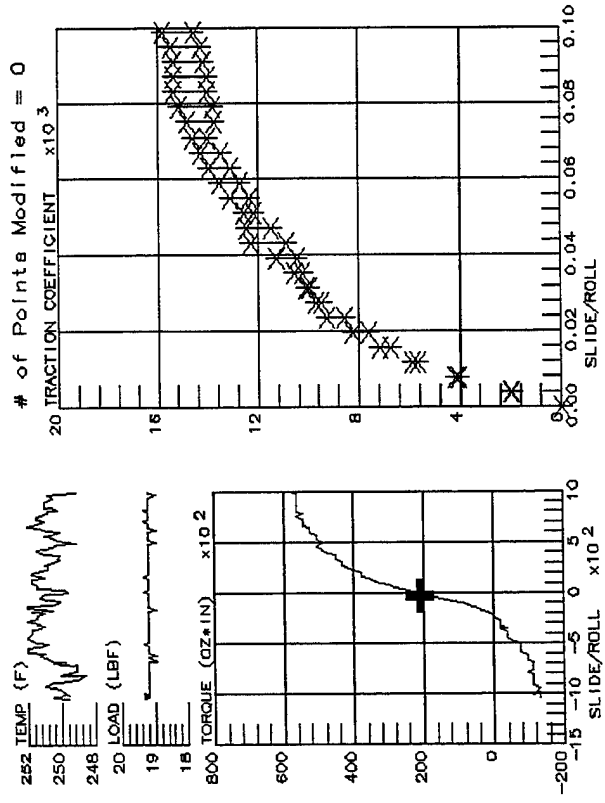
BO 81-288 ApiezonC+5%Bardhal(VacKote) #248
250F 19LBF 5093RPM 10 FILE: 81-288bo250



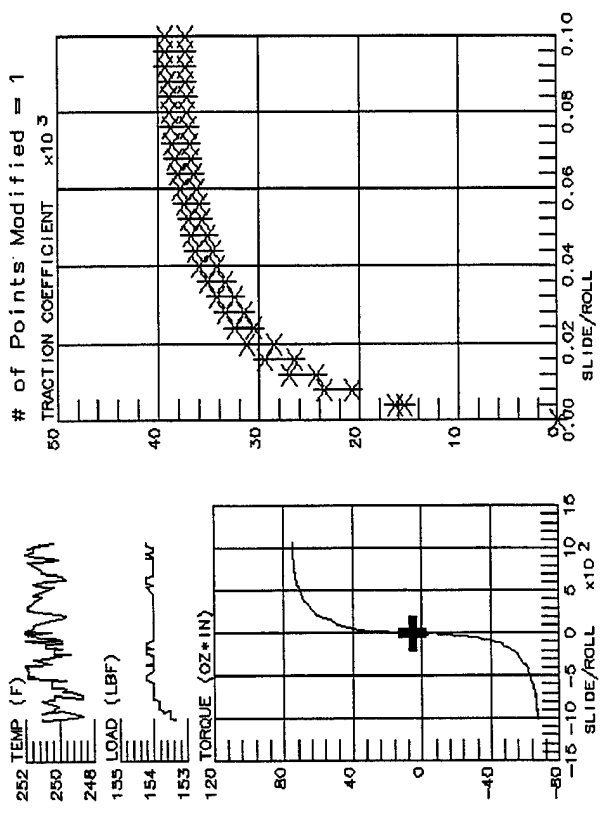
BO 81-288 ApiezonC+5%Bardhal(VacKote) #249
250F 65LBF 5093RPM 11 FILE: 81-288bo250



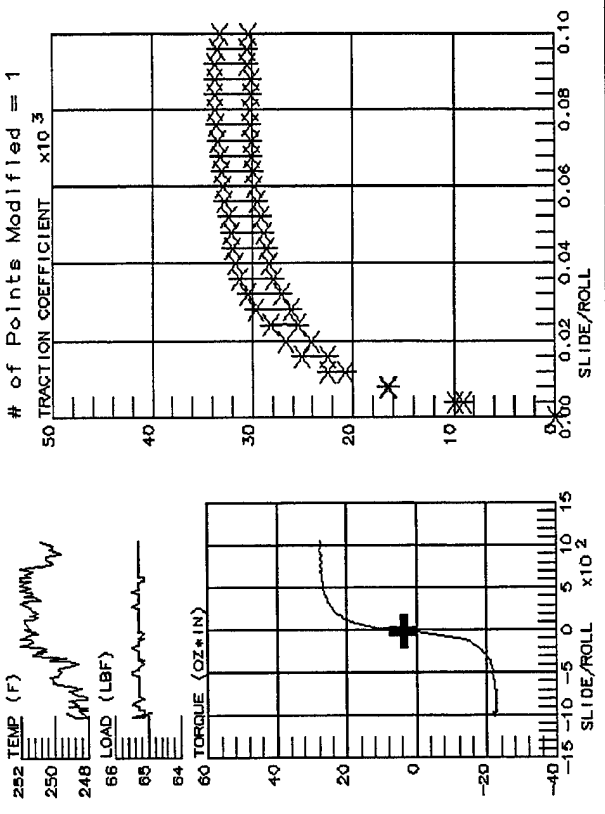
BO 81-288 ApiezonC+5%Bardhal(VacKote) #251
250F 19LBF 7639RPM 13 FILE: 81-288bo250



BO 81-288 ApiezonC+5%Bardhal(VacKote) #250
250F 164LBF 5093RPM 12 FILE: 81-288bo250



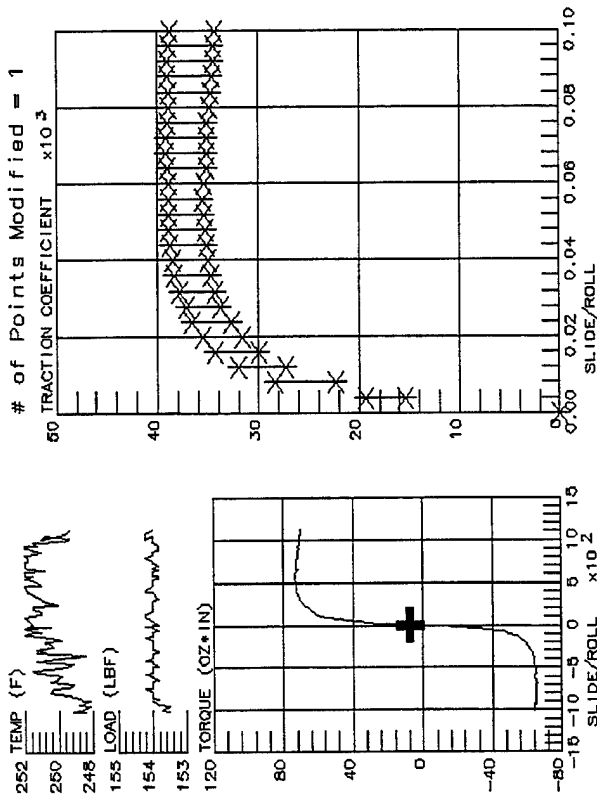
BO 81-288 ApiezonC+5%Bardhal(VacKote) #252
250F 65LBF 7639RPM 14 FILE: 81-288bo250



SHIRLEY HOI K. CHAN

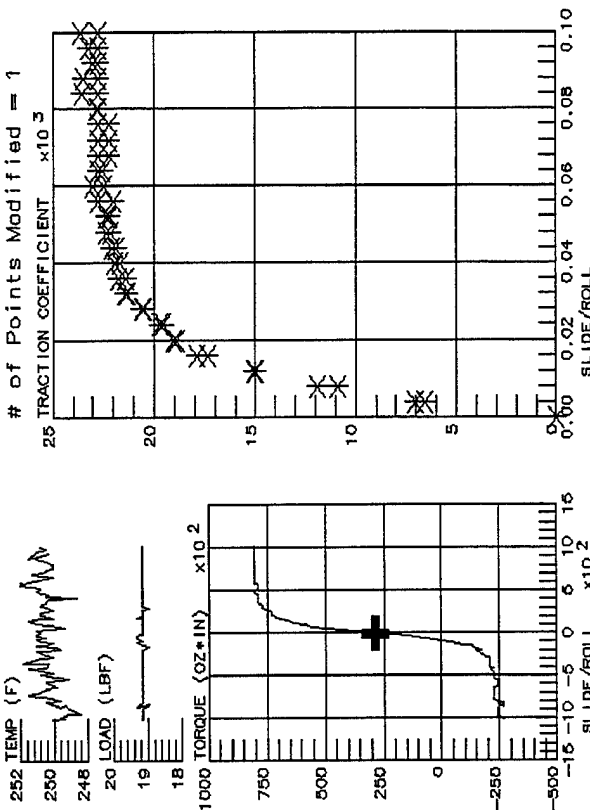
250F 154LBF 7639RPM 15 FILE: 81-288b0250
81-288 AplezonC+5%Bardhal (VacKote) #253

of Points Modified = 1



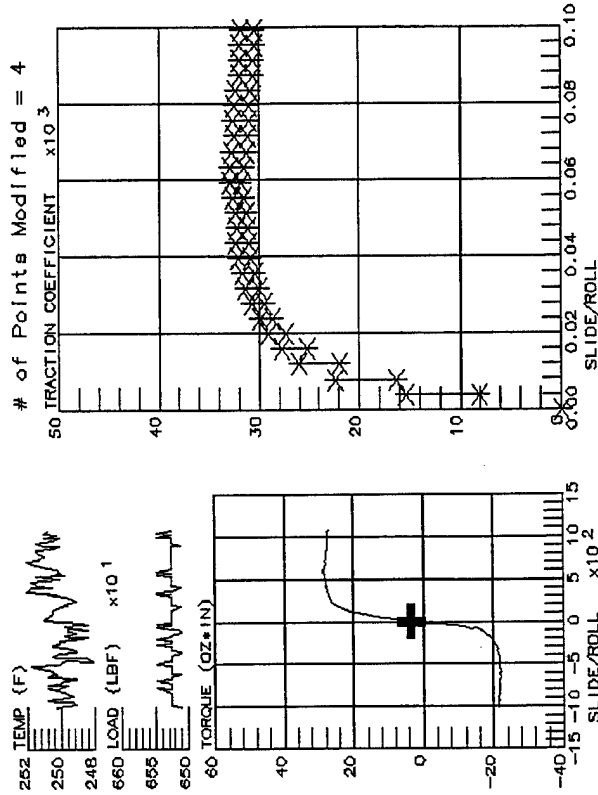
BO 81-288 AplezonC+5%Bardhal (VacKote) #254
250F 19LEF 10186RPM 18 FILE: 81-288b0250

of Points Modified = 1



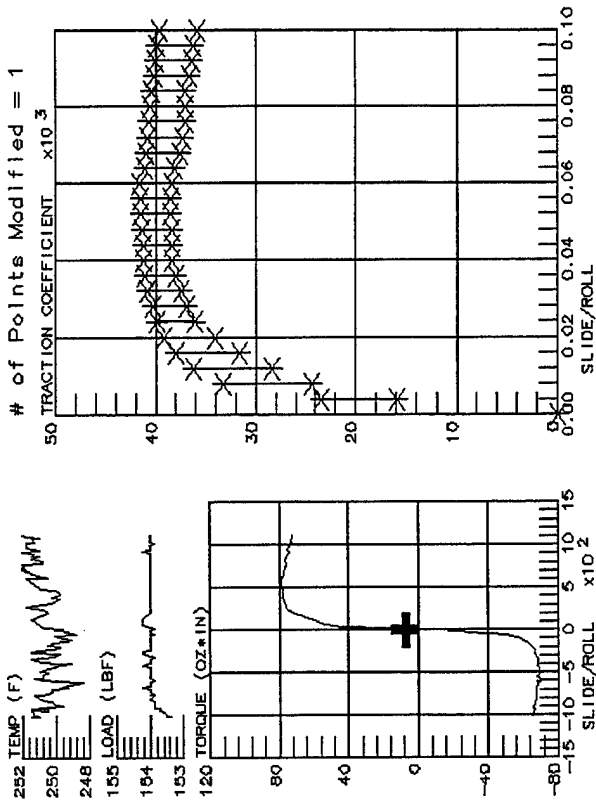
BO 81--288 ApiezonC+5%Bardhal (VacKote) #255
250F 65LBF 10186RPM 17 FILE: 81-288b0250

of Points Modified = 4

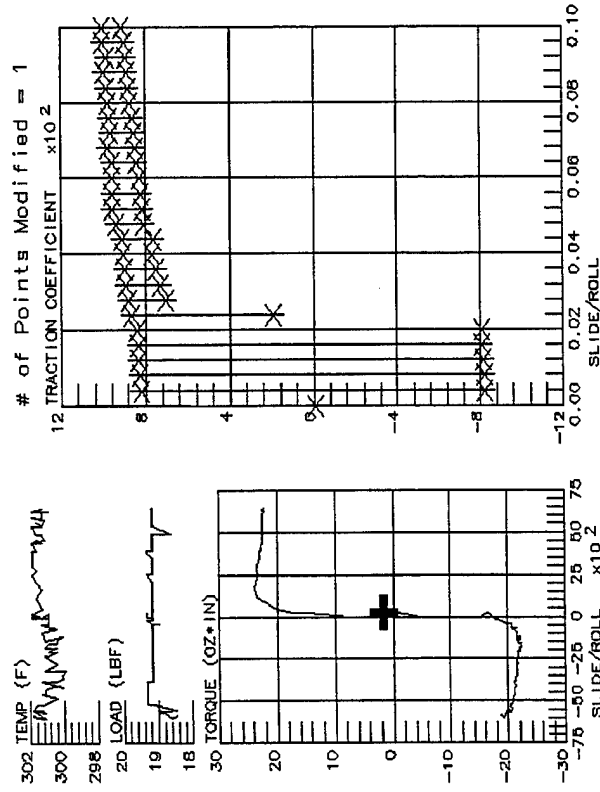


BO 81-288 ApiezonC+5%Bardhal(VackOte) #256
2250F 154LBF 10186RPM 18 FILE: 81-288bc250

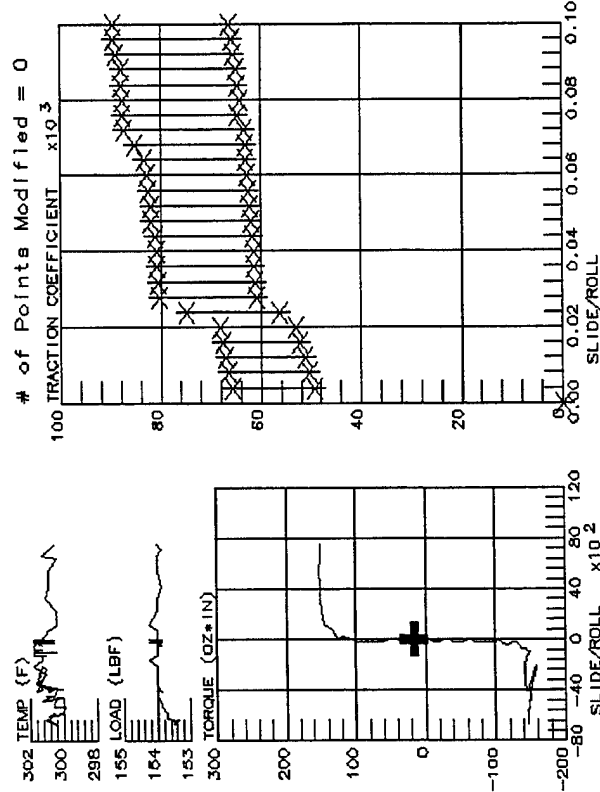
of Points Modified = 1



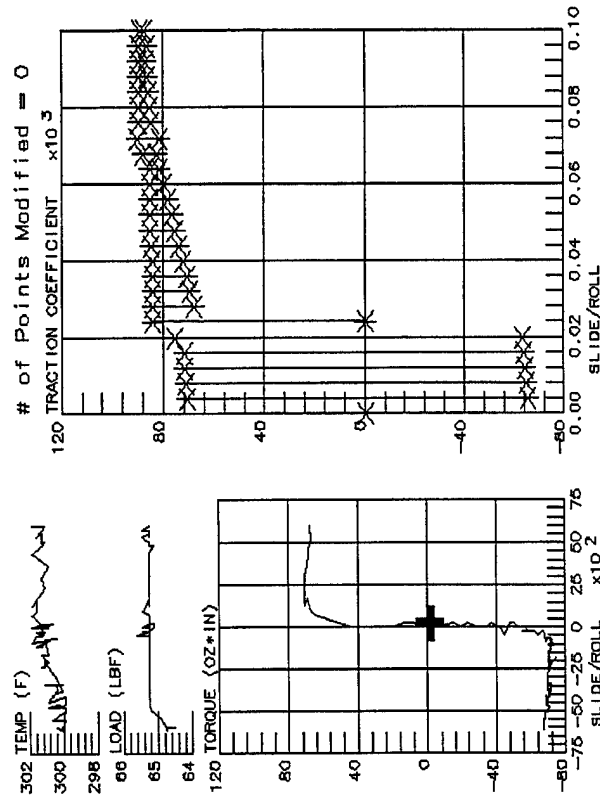
BO 81-288 ApiezonC+5%Bardhal(Vackote) #257
300F 19LBF 318RPM 1 FILE: 81-288bo300



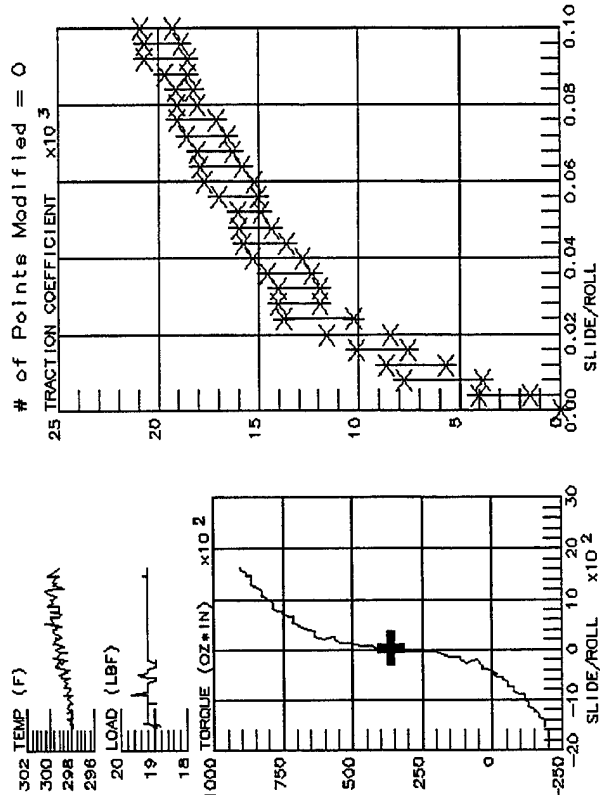
BO 81-288 ApiezonC+5%Bardhal(Vackote) #259
300F 154LBF 318RPM 3 FILE: 81-288bo300



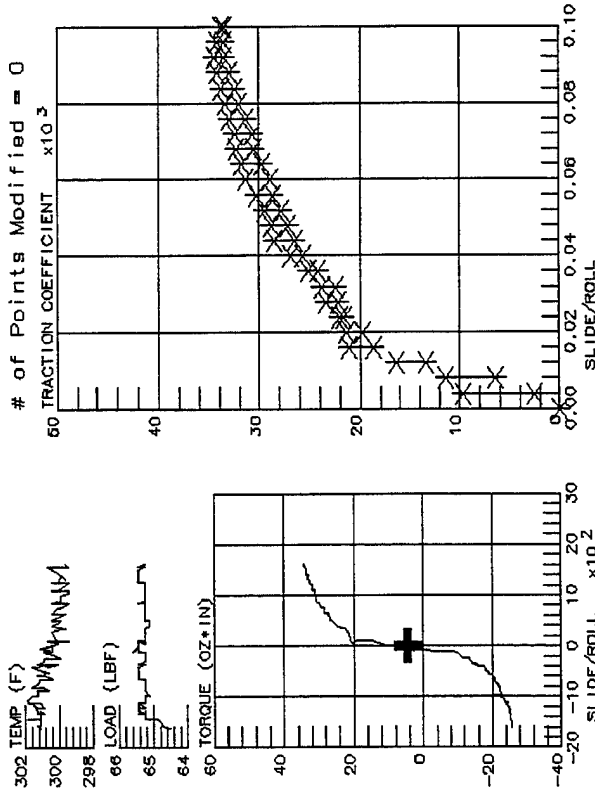
BO 81-288 ApiezonC+5%Bardhal(Vackote) #258
300F 65LBF 318RPM 2 FILE: 81-288bo300



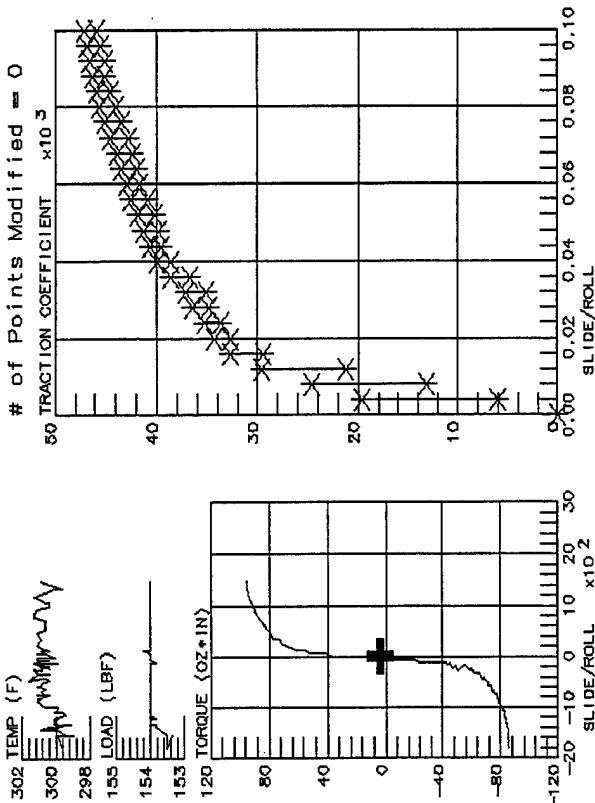
BO 81-288 ApiezonC+5%Bardhal(Vackote) #260
300F 19LBF 1273RPM 4 FILE: 81-288bo300



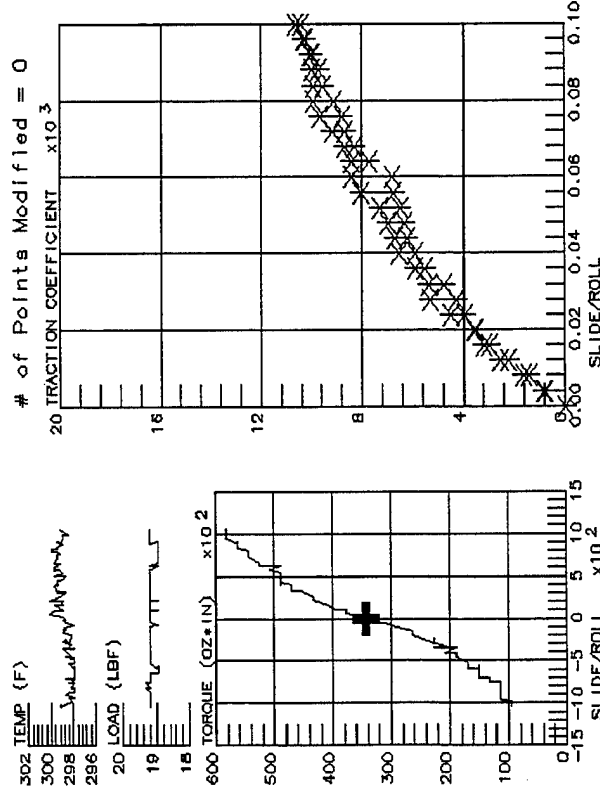
BO 81-288 ApiezonC+5%Bardhal(VacKote) #261
300F 65LBF 1273RPM 6 FILE: 81-288bo300



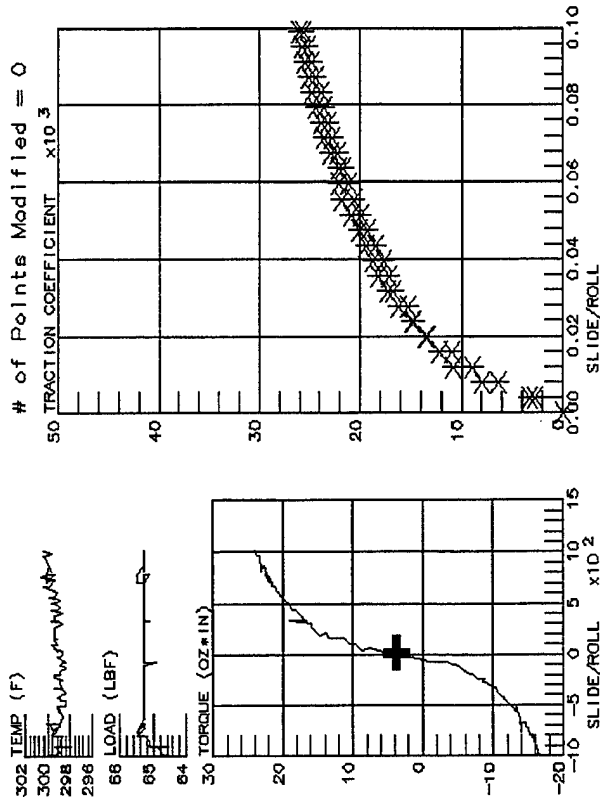
BO 81-288 ApiezonC+5%Bardhal(VacKote) #262
300F 164LBF 1273RPM 8 FILE: 81-288bo300



BO 81-288 ApiezonC+5%Bardhal(VacKote) #263
300F 19LBF 2546RPM 7 FILE: 81-288bo300

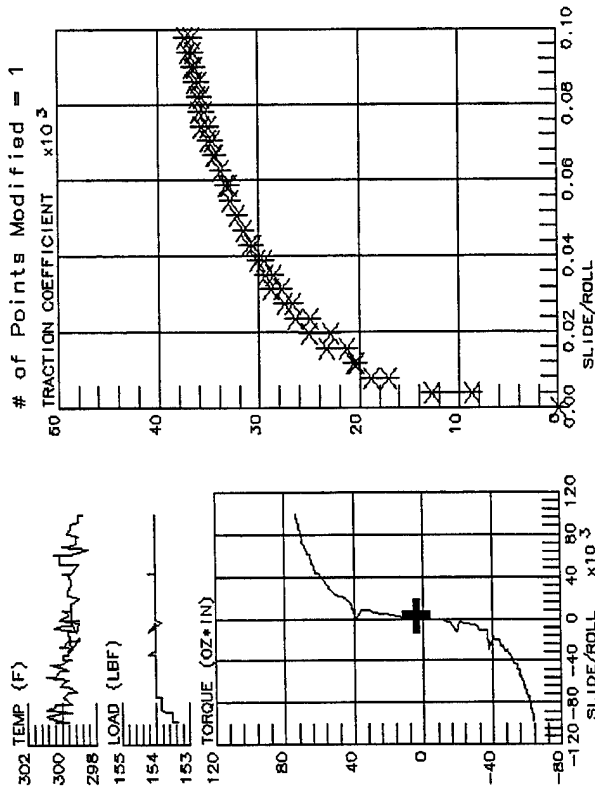


BO 81-288 ApiezonC+5%Bardhal(VacKote) #264
300F 65LBF 2546RPM 8 FILE: 81-288bo300



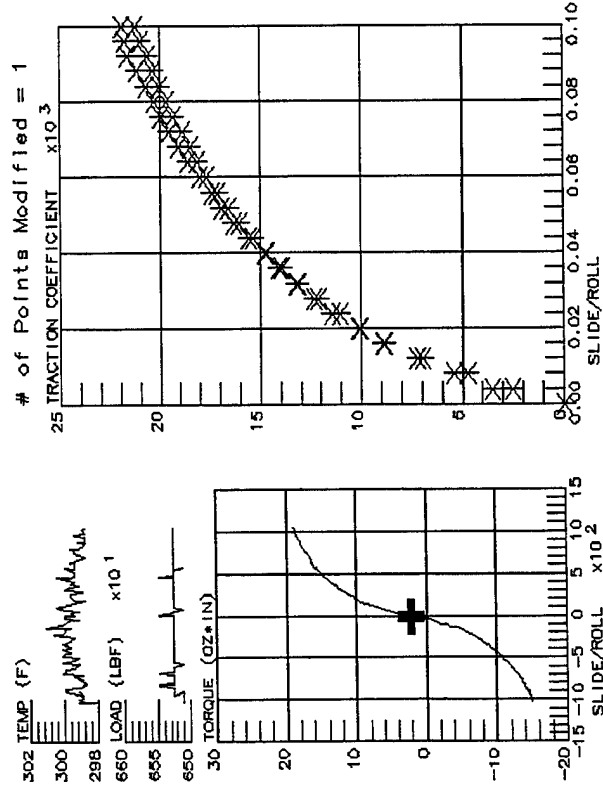
BO 81-288 ApiezonC+5%Bardhal(VacKote) #286
300F 154LBF 2546RPM 9 FILE: 81-288bo300

of Points Modified = 1



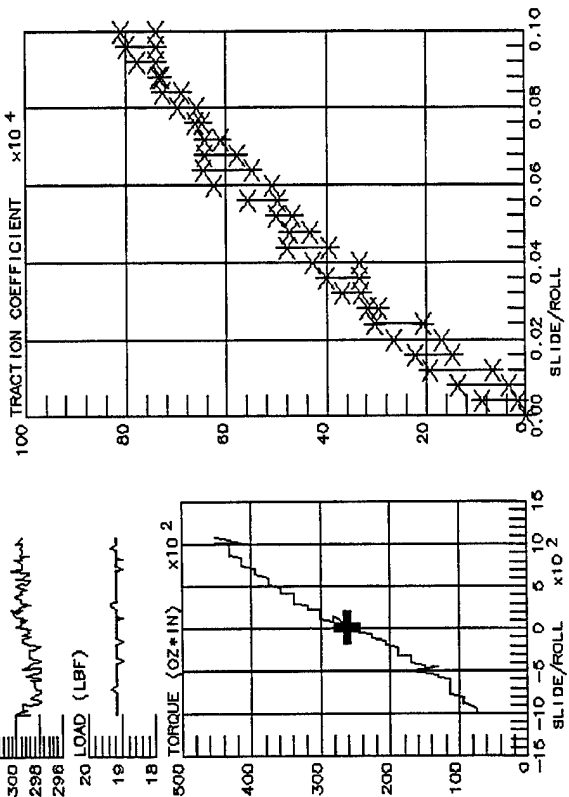
BO 81-288 ApiezonC+5%Bardhal(VacKote) #267
300F 65LBF 5093RPM 11 FILE: 81-288bo300

of Points Modified = 1



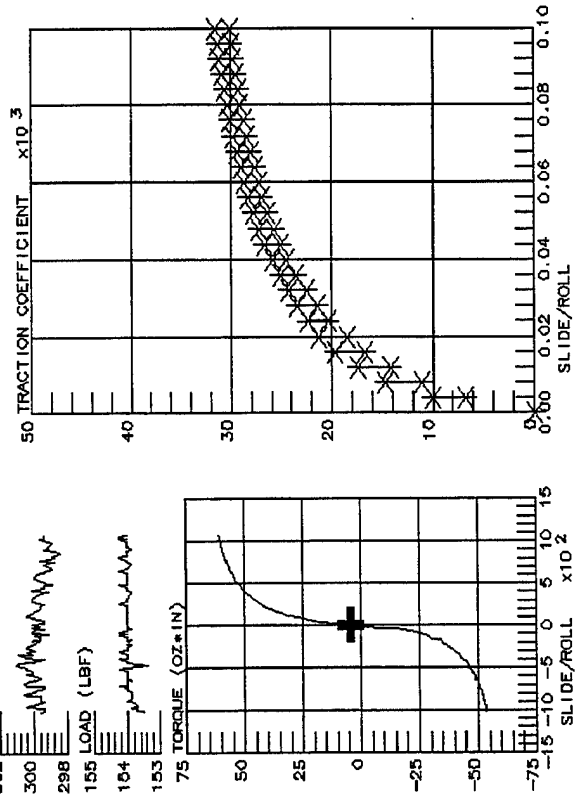
BO 81-288 ApiezonC+5%Bardhal(VacKote) #268
300F 19LBF 5093RPM 10 FILE: 81-288bo300

of Points Modified = 0

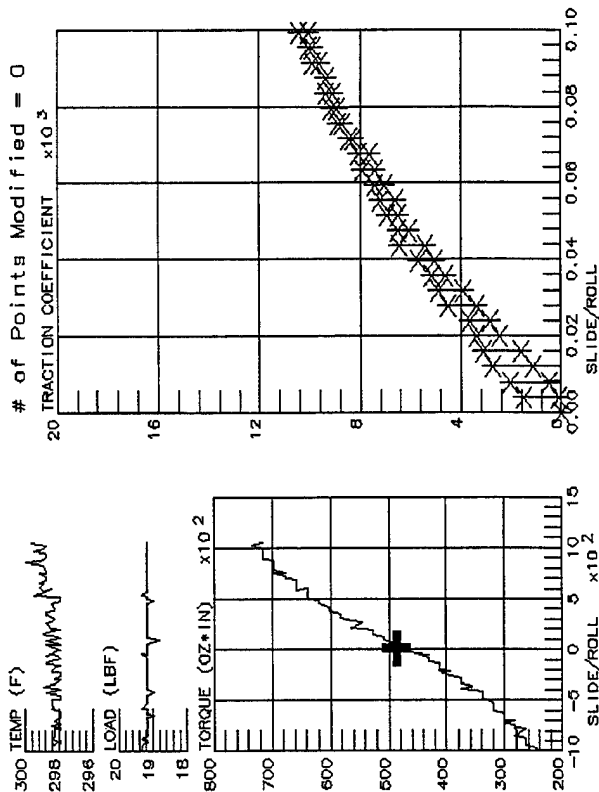


BO 81-288 ApiezonC+5%Bardhal(VacKote) #268
300F 154LBF 5093RPM 12 FILE: 81-288bo300

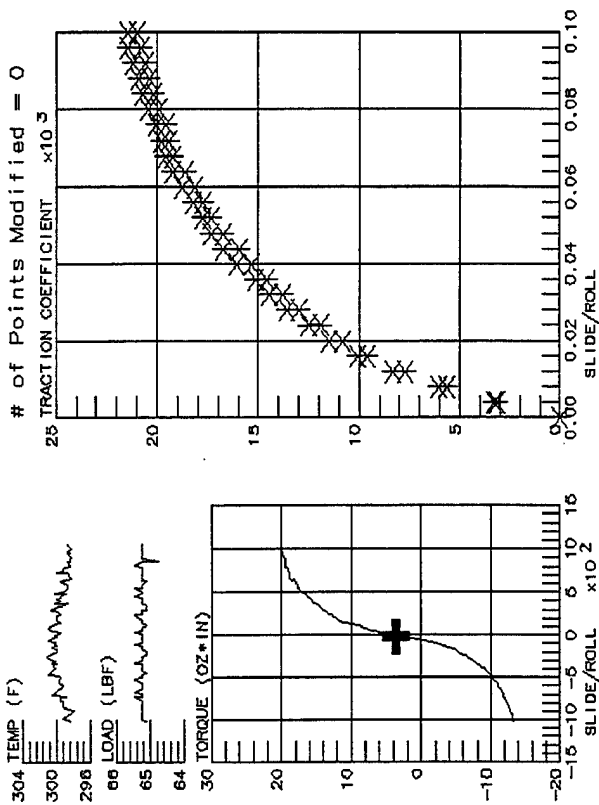
of Points Modified = 1



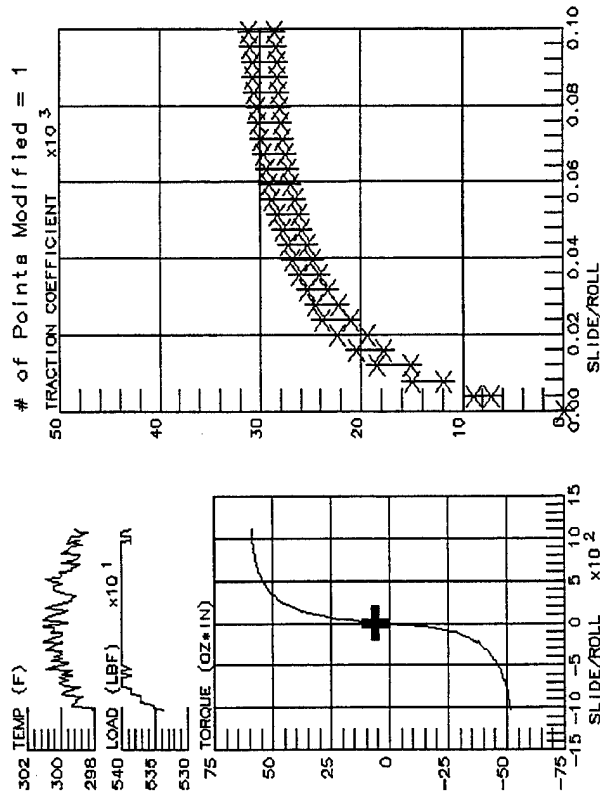
BO 81-288 ApiezonC+5%Bardhal(VacKote) #269
300F 19LBF 7639RPM 13 FILE: 81-288b0300



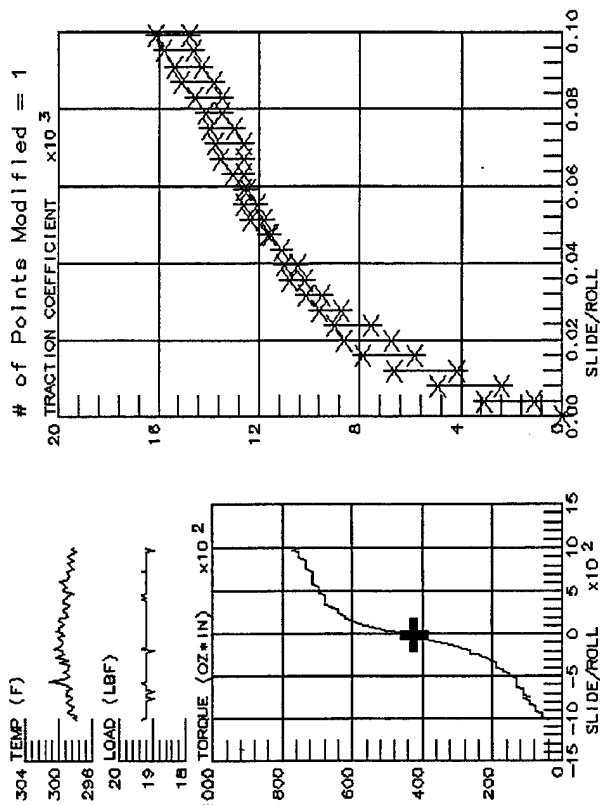
BO 81-288 ApiezonC+5%Bardhal(VacKote) #270
300F 66LBF 7639RPM 14 FILE: 81-288b0300



BO 81-288 ApiezonC+5%Bardhal(VacKote) #271
300F 154LBF 7639RPM 15 FILE: 81-288b0300

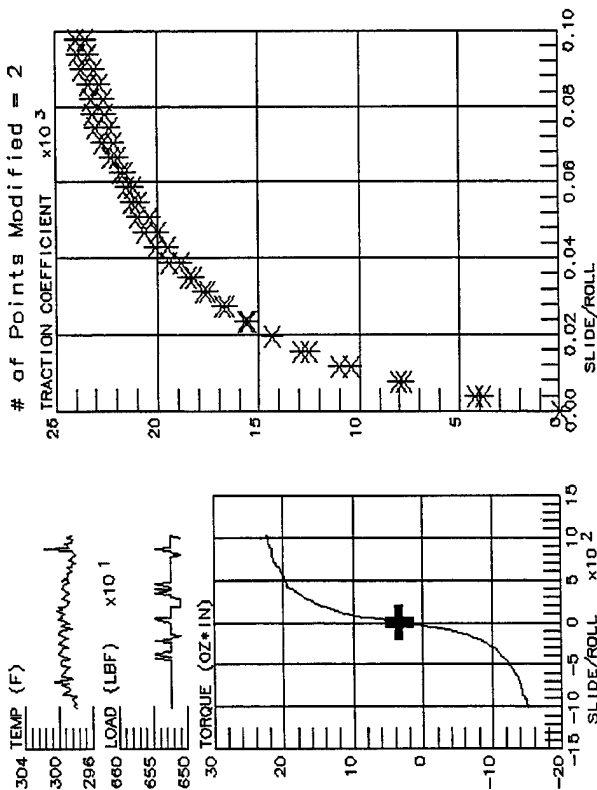


BO 81-288 ApiezonC+5%Bardhal(VacKote) #272
300F 19LBF 1018RPM 16 FILE: 81-288b0300



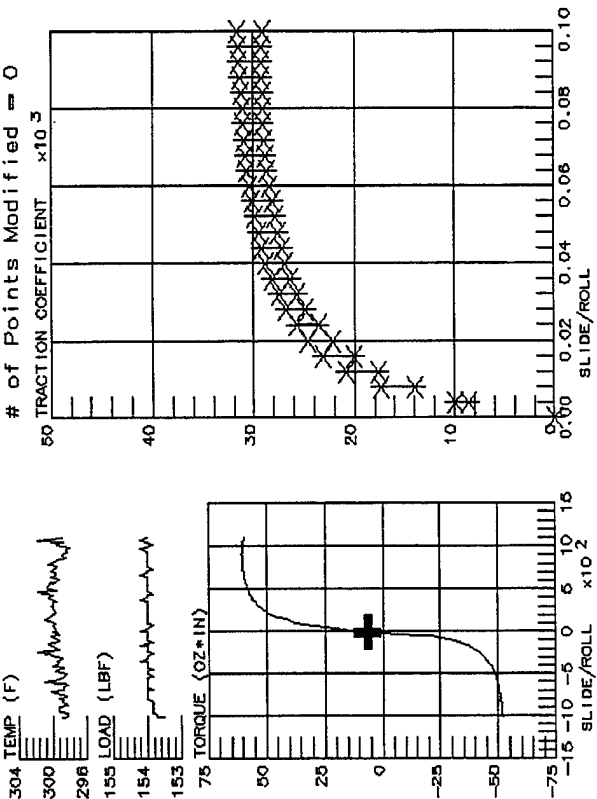
BO 81-288 ApiezonC+5%Bardhal(Vackote) #273
 300F 65LBF 1018RPM 17 FILE: 81-288bc300

of Points Modified = 2



BO 81-288 ApiezonC+5%Bardhal(Vackote) #274
 300F 154LBF 1018RPM 18 FILE: 81-288bc300

of Points Modified = 0

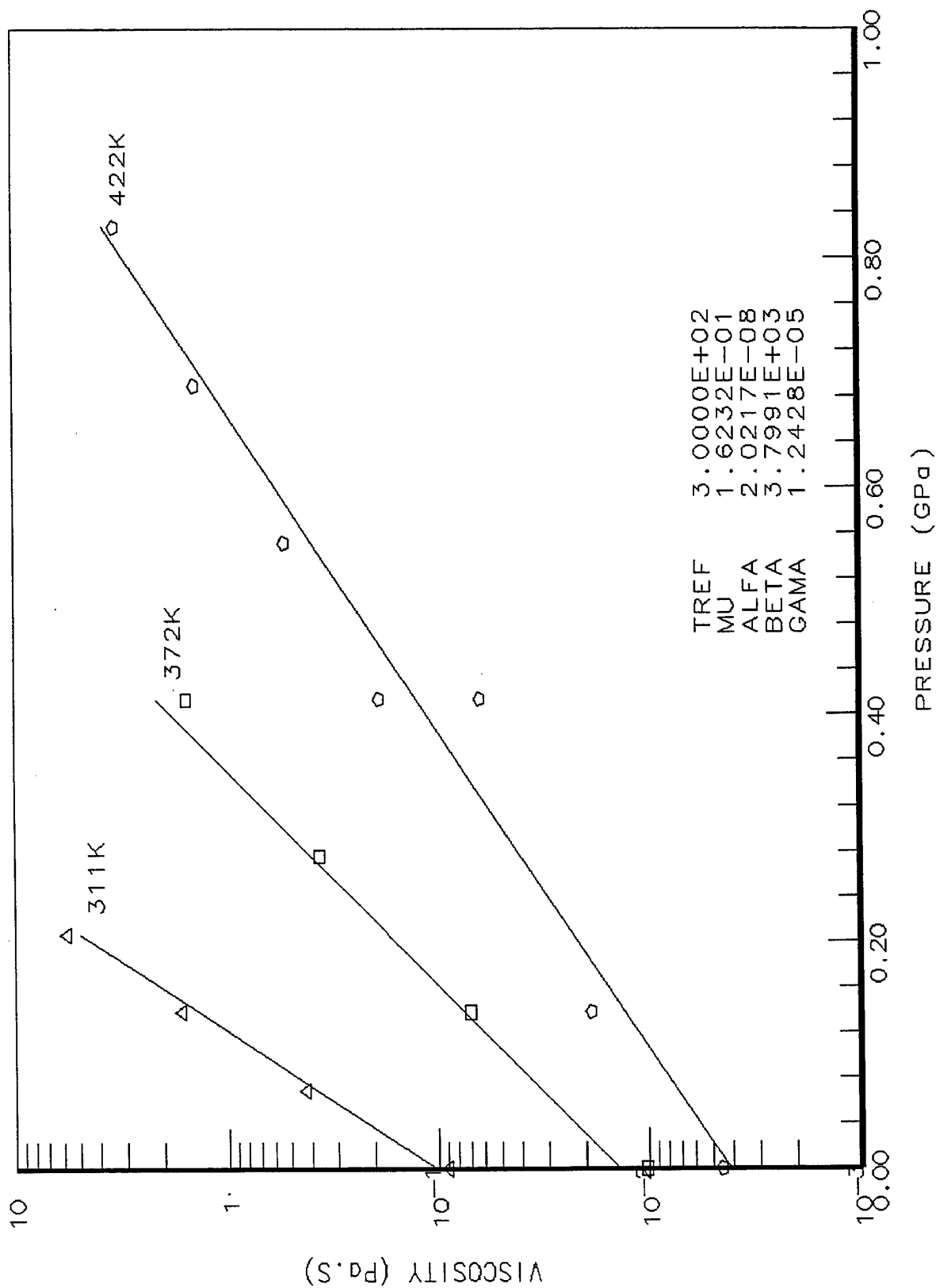


Lubricant name = BO 81-288 ApiezonC+5%Bardhal(VacKote)

NEWTONIAN MODEL TYPE 1

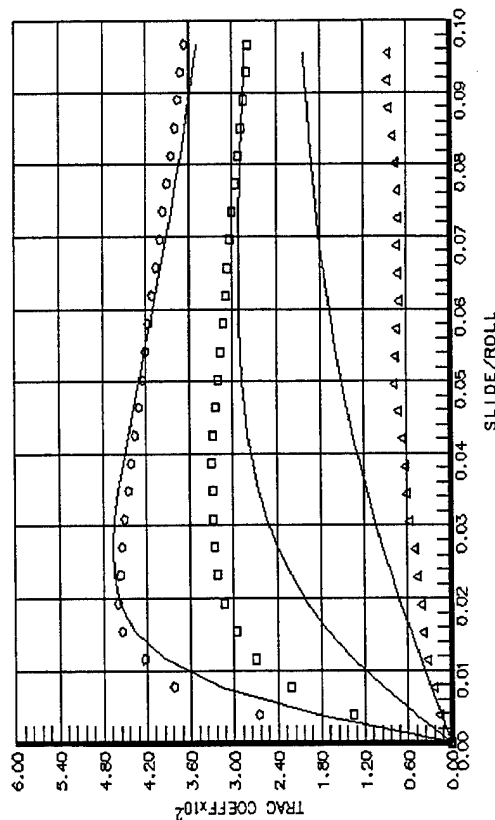
| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| bo1.dat | 3.0000E+02 | 5.0790E+00 | 4.1257E+00 | 6.0000E-09 | 8.9632E-02 |
| bo2.dat | 3.0000E+02 | 1.0160E+01 | 1.6956E+00 | 6.0000E-09 | 4.3121E-02 |
| bo3.dat | 3.0000E+02 | 1.5239E+01 | 1.4524E+00 | 6.0000E-09 | 3.4818E-02 |
| bo4.dat | 3.0000E+02 | 2.0320E+01 | 1.7824E+00 | 6.0000E-09 | 3.8083E-02 |
| bo5.dat | 3.1111E+02 | 5.0790E+00 | 3.3478E+00 | 6.0000E-09 | 1.1317E-01 |
| bo6.dat | 3.1111E+02 | 1.0160E+01 | 2.0868E+00 | 6.0000E-09 | 5.1280E-02 |
| bo7.dat | 3.1111E+02 | 1.5239E+01 | 1.7896E+00 | 6.0000E-09 | 4.7212E-02 |
| bo8.dat | 3.1111E+02 | 2.0320E+01 | 1.3464E+00 | 6.0000E-09 | 3.6815E-02 |
| bo9.dat | 3.3889E+02 | 5.0790E+00 | 1.3261E+00 | 6.0000E-09 | 1.6552E-01 |
| bo10.dat | 3.3889E+02 | 1.0160E+01 | 8.7282E-01 | 6.0000E-09 | 6.7358E-02 |
| bo11.dat | 3.3889E+02 | 1.5239E+01 | 7.4268E-01 | 6.0000E-09 | 4.9028E-02 |
| bo12.dat | 3.3889E+02 | 2.0320E+01 | 8.2648E-01 | 6.0000E-09 | 4.3151E-02 |
| bo13.dat | 3.6667E+02 | 5.0790E+00 | 5.0837E-01 | 6.0000E-09 | 2.5989E-01 |
| bo14.dat | 3.6667E+02 | 1.0160E+01 | 3.6428E-01 | 6.0000E-09 | 9.8547E-02 |
| bo15.dat | 3.6667E+02 | 1.5239E+01 | 3.7224E-01 | 6.0000E-09 | 6.8380E-02 |
| bo16.dat | 3.6667E+02 | 2.0320E+01 | 4.5221E-01 | 6.0000E-09 | 6.1175E-02 |
| bo17.dat | 3.9444E+02 | 5.0790E+00 | 2.0582E-01 | 6.0000E-09 | 3.1561E-01 |
| bo18.dat | 3.9444E+02 | 1.0160E+01 | 1.8062E-01 | 6.0000E-09 | 1.5342E-01 |
| bo19.dat | 3.9444E+02 | 1.5239E+01 | 1.8979E-01 | 6.0000E-09 | 8.7490E-02 |
| bo20.dat | 3.9444E+02 | 2.0320E+01 | 3.4516E-01 | 6.0000E-09 | 9.4670E-02 |
| bo21.dat | 4.2222E+02 | 5.0790E+00 | 8.9828E-02 | 6.0000E-09 | 4.9566E-01 |
| bo22.dat | 4.2222E+02 | 1.0160E+01 | 6.3344E-02 | 6.0000E-09 | 1.9749E-01 |
| bo23.dat | 4.2222E+02 | 1.5239E+01 | 6.5332E-02 | 6.0000E-09 | 1.2363E-01 |
| bo24.dat | 4.2222E+02 | 2.0320E+01 | 8.9956E-02 | 6.0000E-09 | 1.0216E-01 |

81-288 VAC Kote Viscosity Model Type 2



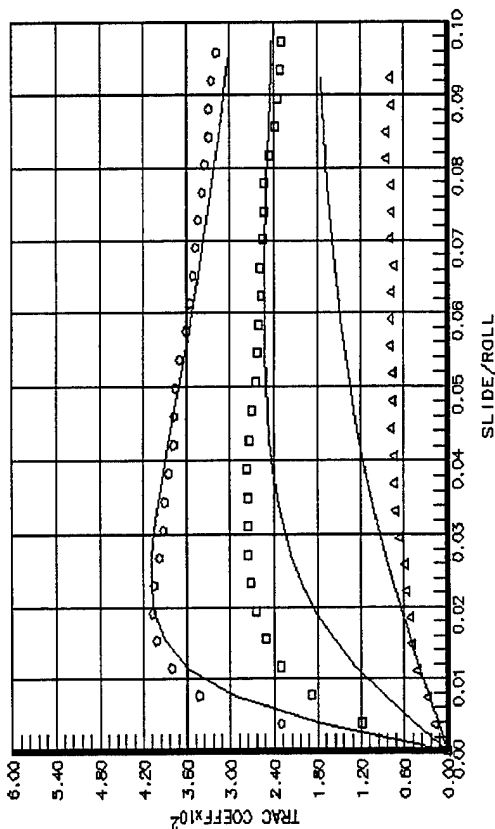
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 $bq1.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 10.13M/S 300K # 3 2.233E+00 6.000E-09 4.890E-02
 320N 10.13M/S 300K # 4 2.233E+00 6.000E-09 4.890E-02
 765N 10.13M/S 300K # 5 2.233E+00 6.000E-09 4.890E-02



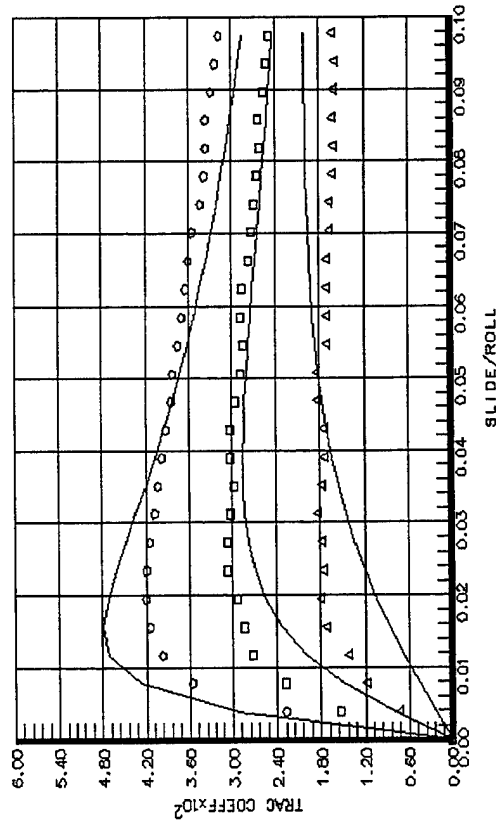
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 $bq2.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 15.24M/S 300K # 8 1.345E+00 6.000E-09 3.942E-02
 320N 15.24M/S 300K # 9 1.345E+00 6.000E-09 3.942E-02
 765N 15.24M/S 300K # 10 1.345E+00 6.000E-09 3.942E-02



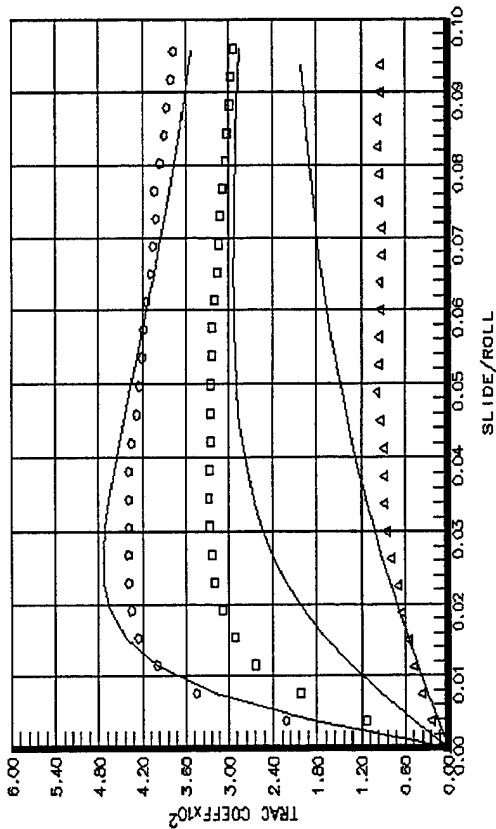
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 $bq3.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 20.34M/S 300K # 13 1.876E+00 6.000E-09 4.247E-02
 320N 20.34M/S 300K # 14 1.876E+00 6.000E-09 4.247E-02
 765N 20.34M/S 300K # 15 1.876E+00 6.000E-09 4.247E-02

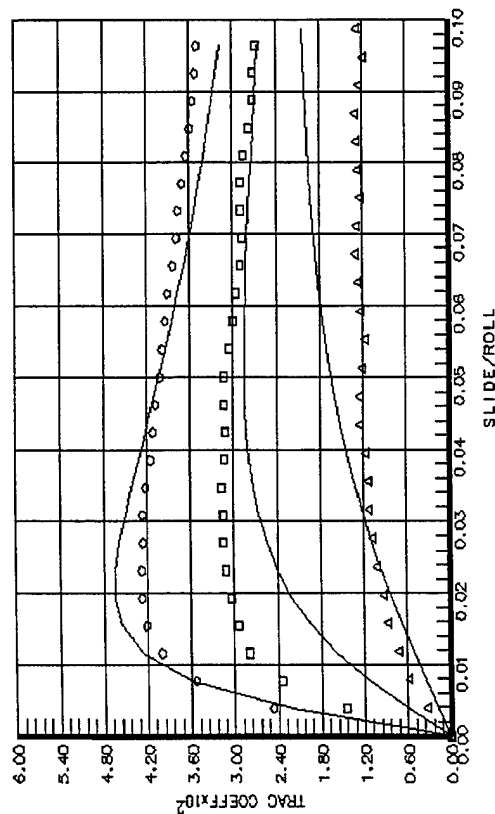


BQ 81-288 ApiezonC+5%Bardhal (VacKote)

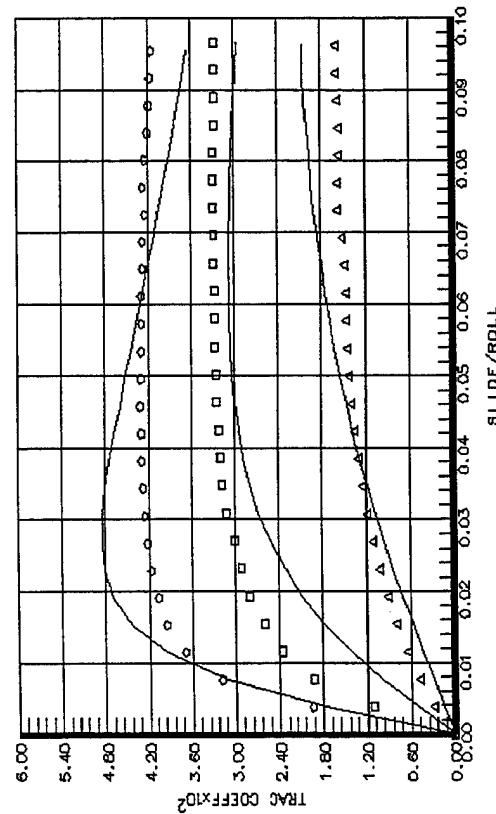
NEWTONIAN MODEL TYPE 1 $bq4.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 10.13M/S 311K # 63 1.831E+00 6.000E-09 5.130E-02
 320N 10.13M/S 311K # 64 1.831E+00 6.000E-09 5.130E-02
 765N 10.13M/S 311K # 65 1.831E+00 6.000E-09 5.130E-02



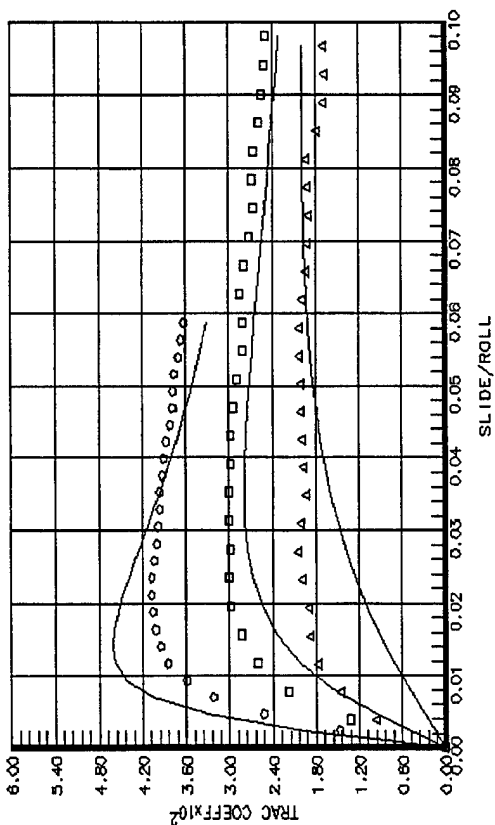
BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq6.dat$ $XMU*$ $ALFA*$ $BETA*$
 93N 15.24M/S 311K # 68 1.832E+00 6.000E-09 4.261E-02
 320N 15.24M/S 311K # 69 1.832E+00 6.000E-09 4.261E-02
 765N 15.24M/S 311K # 70 1.832E+00 6.000E-09 4.261E-02



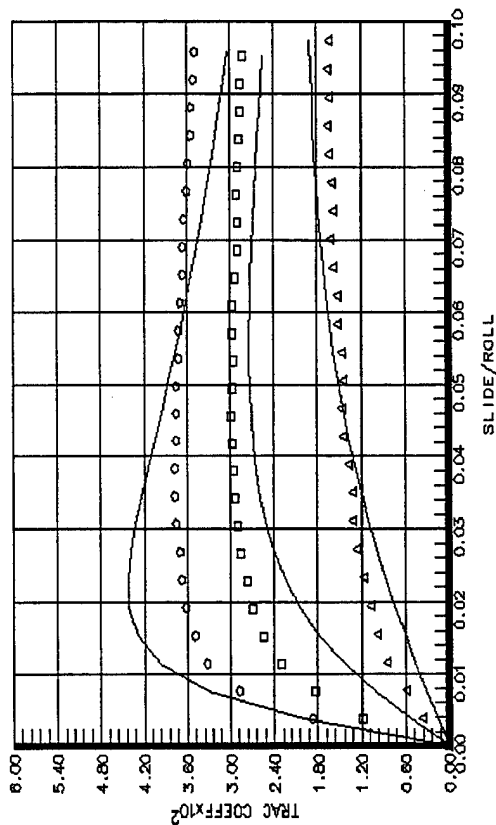
BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq7.dat$ $XMU*$ $ALFA*$ $BETA*$
 93N 10.13M/S 339K #105 1.168E+00 6.000E-09 7.168E-02
 320N 10.13M/S 339K #106 1.168E+00 6.000E-09 7.168E-02
 765N 10.13M/S 339K #107 1.168E+00 6.000E-09 7.168E-02



BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq8.dat$ $XMU*$ $ALFA*$ $BETA*$
 93N 20.34M/S 311K # 73 1.808E+00 6.000E-09 4.782E-02
 320N 20.34M/S 311K # 74 1.808E+00 6.000E-09 4.782E-02
 765N 20.34M/S 311K # 75 1.808E+00 6.000E-09 4.782E-02

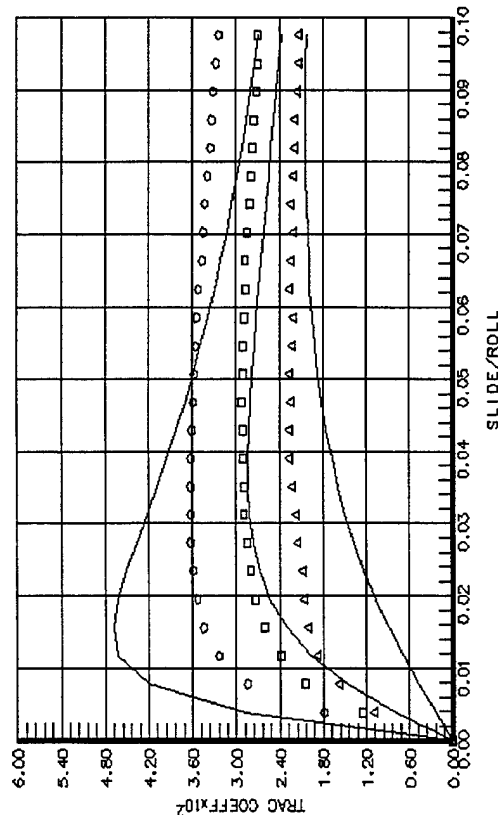


BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq9.dat$ $XMU*$ $ALFA*$ $BETA*$
 93N 15.24M/S 339K #110 9.917E-01 6.000E-09 5.840E-02
 320N 15.24M/S 339K #111 9.917E-01 6.000E-09 5.840E-02
 765N 15.24M/S 339K #112 9.917E-01 6.000E-09 5.840E-02



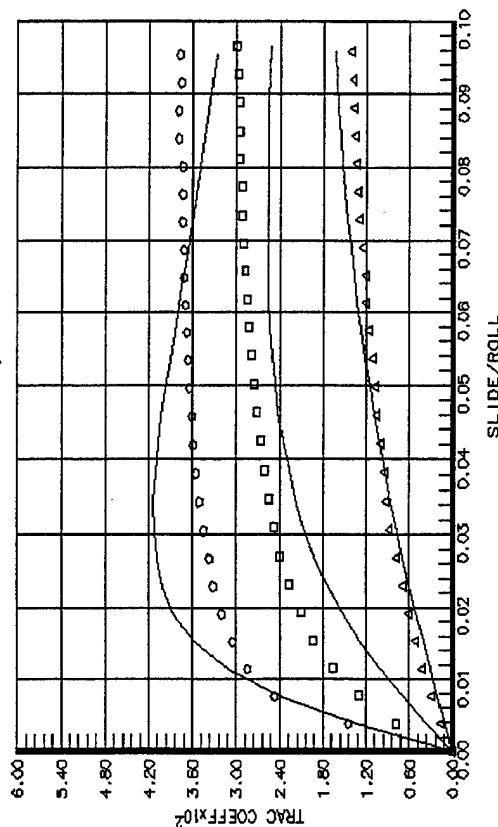
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bqi1.dat XMU* ALFA* BETA*
 93N 20.34W/S 339K #115 1.216E+00 6.000E-09 5.643E-02
 320N 20.34W/S 339K #116 1.216E+00 6.000E-09 5.643E-02
 765N 20.34W/S 339K #117 1.216E+00 6.000E-09 5.643E-02



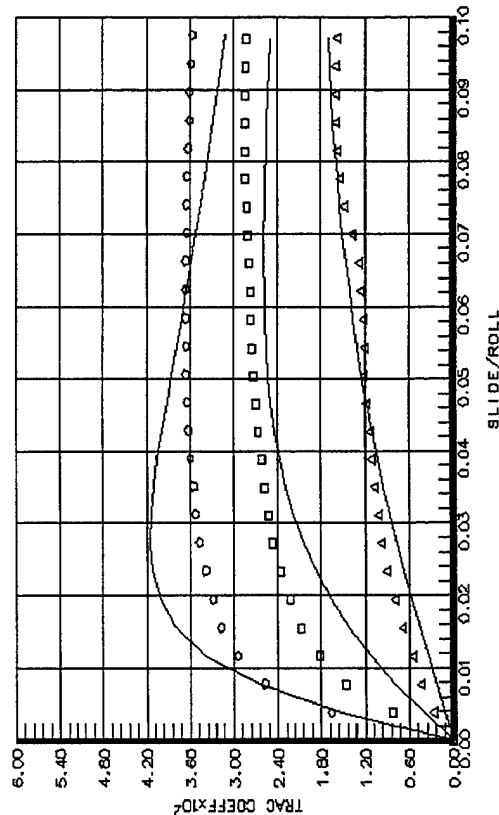
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bqi10.dat XMU* ALFA* BETA*
 93N 10.13W/S 367K #128 6.392E-01 6.000E-08 1.138E-01
 320N 10.13W/S 367K #129 6.392E-01 6.000E-08 1.138E-01
 765N 10.13W/S 367K #131 6.392E-01 6.000E-08 1.138E-01



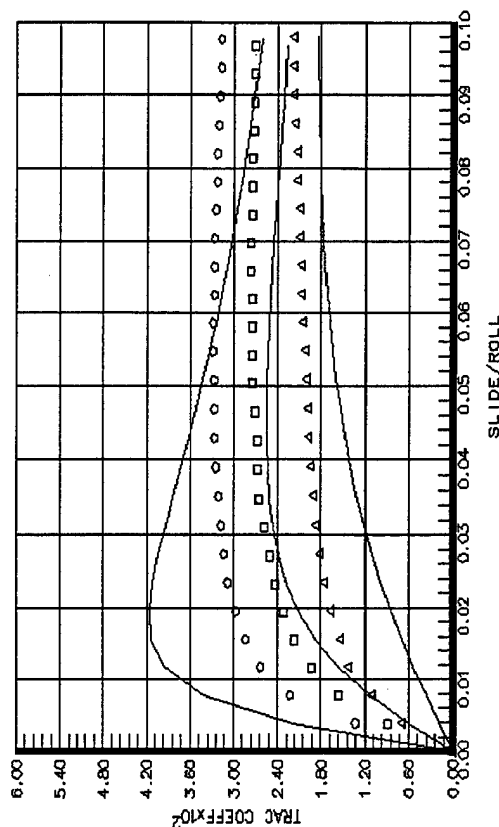
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bqi11.dat XMU* ALFA* BETA*
 93N 15.24W/S 367K #134 4.672E-01 6.000E-09 7.123E-02
 320N 15.24W/S 367K #135 4.672E-01 6.000E-09 7.123E-02
 765N 15.24W/S 367K #136 4.672E-01 6.000E-09 7.123E-02



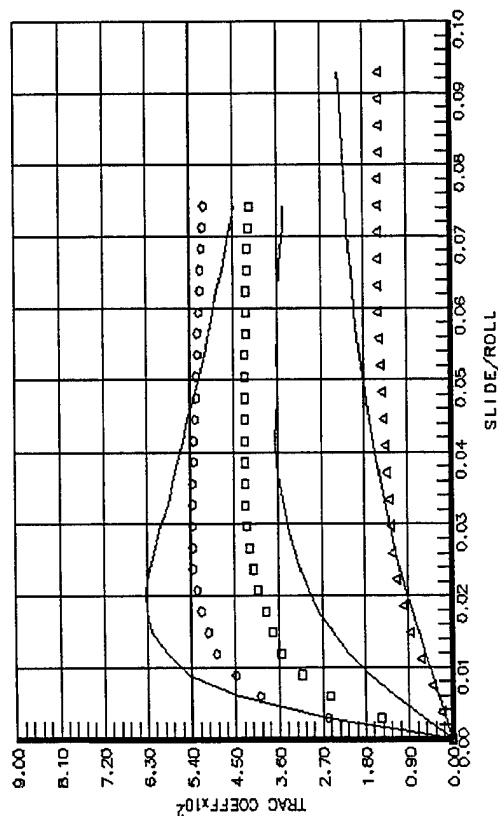
BQ 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bqi12.dat XMU* ALFA* BETA*
 93N 20.34W/S 367K #138 6.307E-01 6.000E-08 7.241E-02
 320N 20.34W/S 367K #140 6.307E-01 6.000E-08 7.241E-02
 765N 20.34W/S 367K #141 6.307E-01 6.000E-08 7.241E-02



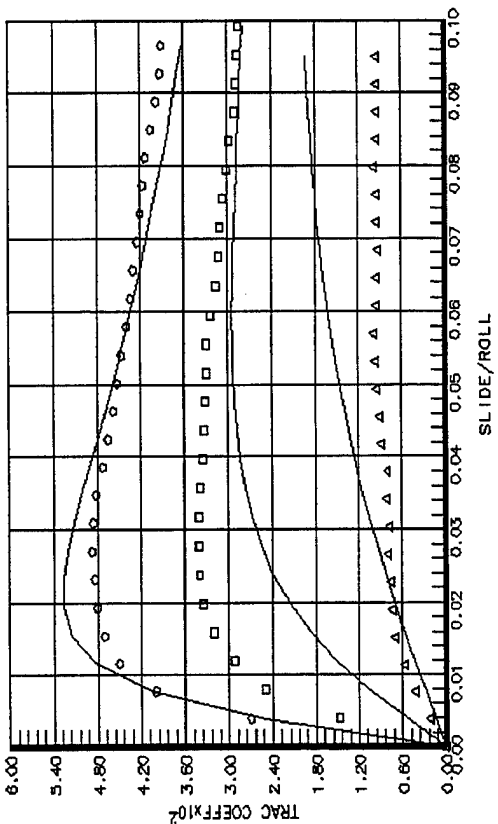
BO 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 bo1.dat

| ALFA* | BETA* | XMU* | BSN | 289N | 685N | 300K # | 73 | 19 | 20 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S |
| 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S |
| 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S | 5.08M/S |



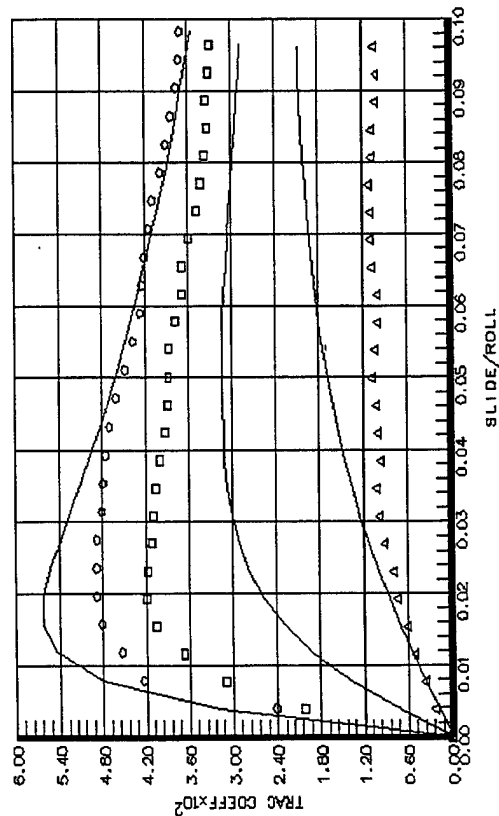
BO 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 bo2.dat

| ALFA* | BETA* | XMU* | BSN | 289N | 685N | 300K # | 59 | 24 | 66 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S |
| 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S |
| 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S |
| 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S | 10.16M/S |



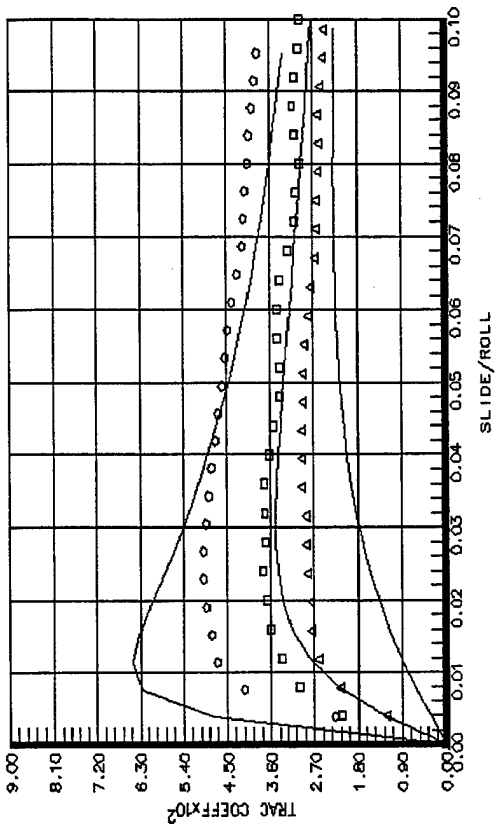
BO 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 bo3.dat

| ALFA* | BETA* | XMU* | BSN | 289N | 685N | 300K # | 54 | 99 | 87 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S |
| 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S |
| 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S |
| 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S | 15.24M/S |



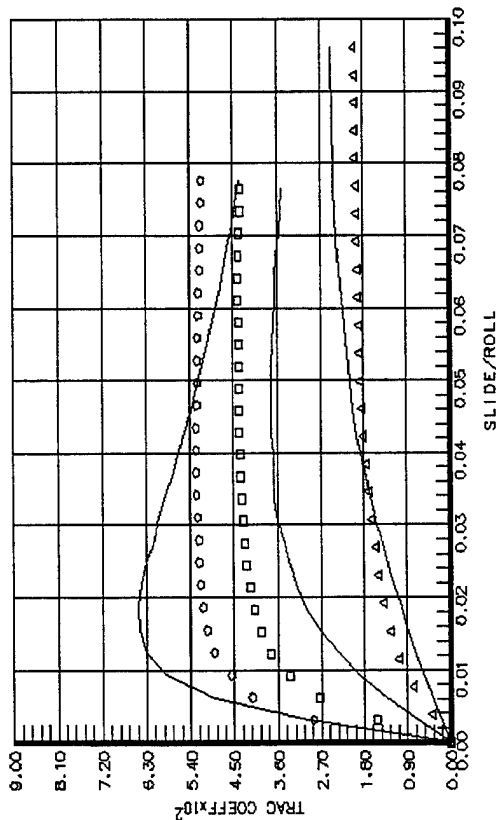
BO 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 bo4.dat

| ALFA* | BETA* | XMU* | BSN | 289N | 685N | 300K # | 28 | 48 | 88 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S |
| 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S |
| 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S |
| 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S | 20.32M/S |



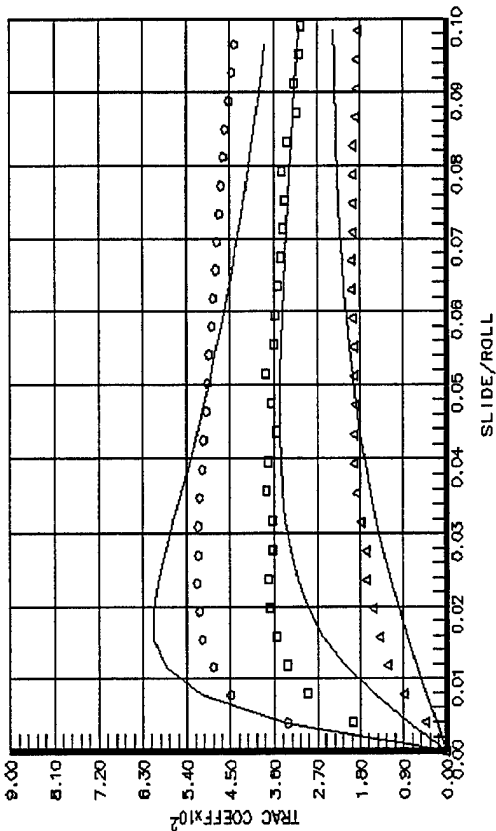
BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo8.dat XMU* ALFA* BETA*
 BSN 5.08M/S 311K #148 3.348E+00 6.000E-09 1.132E-01
 289N 5.08M/S 311K #166 3.348E+00 6.000E-09 1.132E-01
 685N 5.08M/S 311K #167 3.348E+00 6.000E-09 1.132E-01



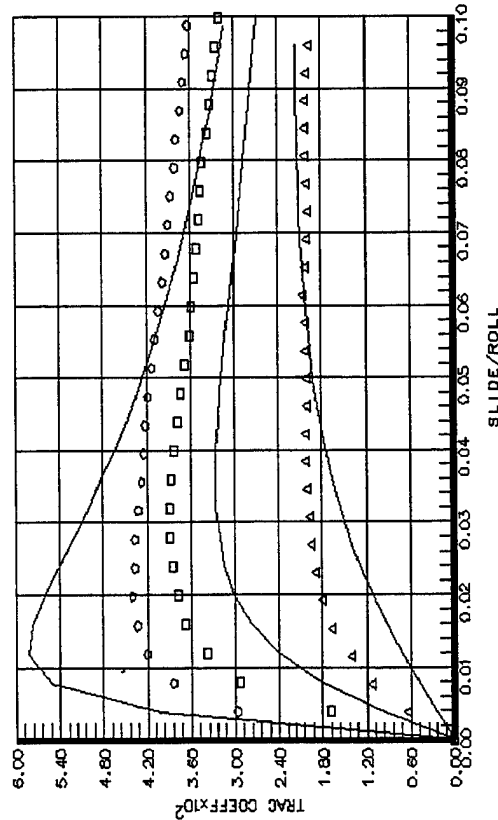
BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo8.dat XMU* ALFA* BETA*
 BSN 10.16M/S 311K #178 2.087E+00 6.000E-09 5.128E-02
 289N 10.16M/S 311K #111 2.087E+00 6.000E-09 5.128E-02
 685N 10.16M/S 311K #139 2.087E+00 6.000E-09 5.128E-02



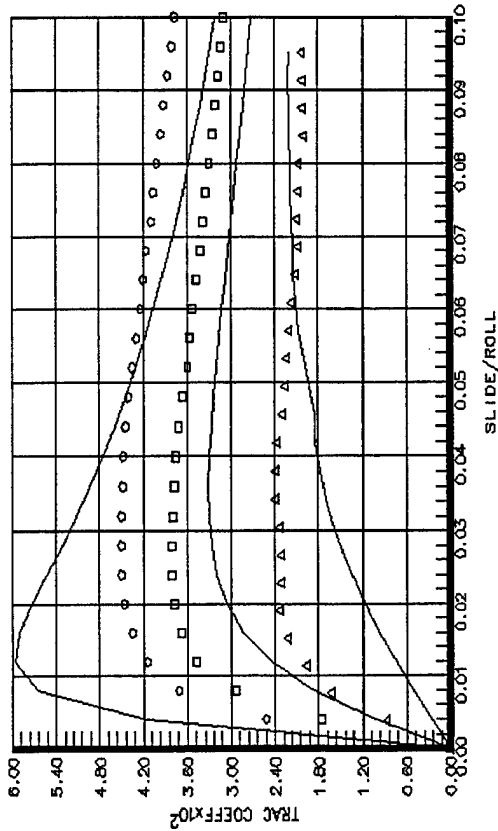
BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo7.dat XMU* ALFA* BETA*
 BSN 15.24M/S 311K #179 1.780E+00 6.000E-09 4.721E-02
 289N 15.24M/S 311K #180 1.780E+00 6.000E-09 4.721E-02
 685N 15.24M/S 311K #142 1.780E+00 6.000E-09 4.721E-02



BO 81-288 ApiezonC+5%Bardhal (Vackote)

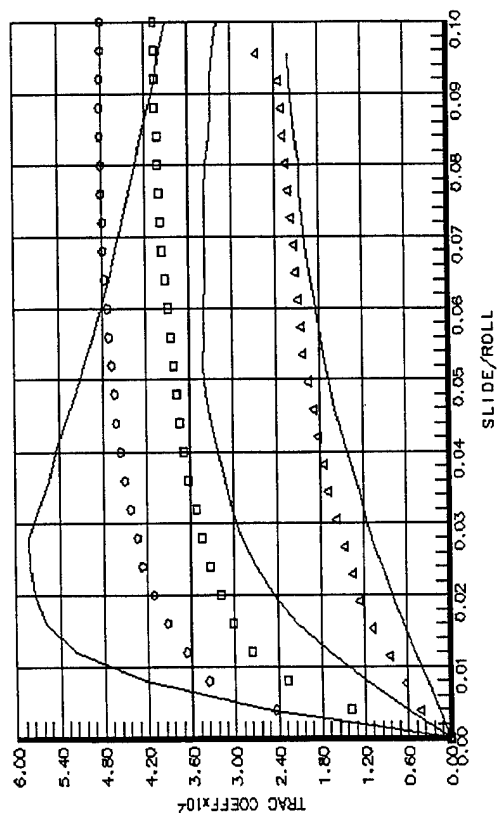
NEWTONIAN MODEL TYPE 1 bo8.dat XMU* ALFA* BETA*
 BSN 20.32M/S 311K #151 1.346E+00 6.000E-09 3.682E-02
 289N 20.32M/S 311K #183 1.346E+00 6.000E-09 3.682E-02
 685N 20.32M/S 311K #184 1.346E+00 6.000E-09 3.682E-02



BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bo11.dat

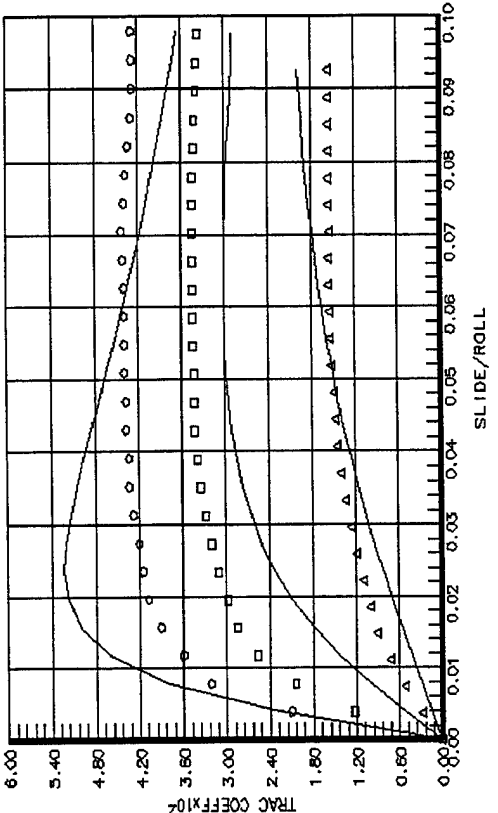
| ALFA* | BETA* |
|-------------------|-----------|
| 5.08M/S 339K #193 | 1.326E+00 |
| 5.08M/S 339K #209 | 1.326E+00 |
| 5.08M/S 339K #210 | 1.326E+00 |



BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bo10.dat

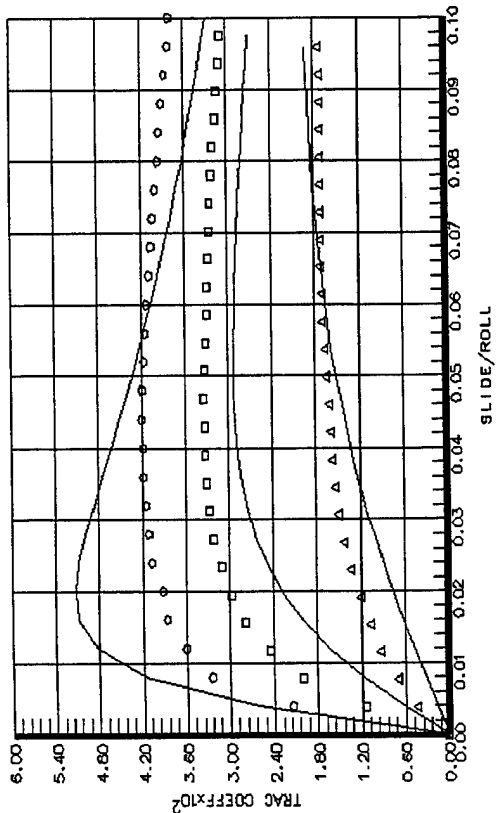
| ALFA* | BETA* |
|--------------------|-----------|
| 10.16M/S 339K #198 | 8.726E-01 |
| 10.16M/S 339K #197 | 8.726E-01 |
| 10.16M/S 339K #196 | 8.726E-01 |



BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1 bo11.dat

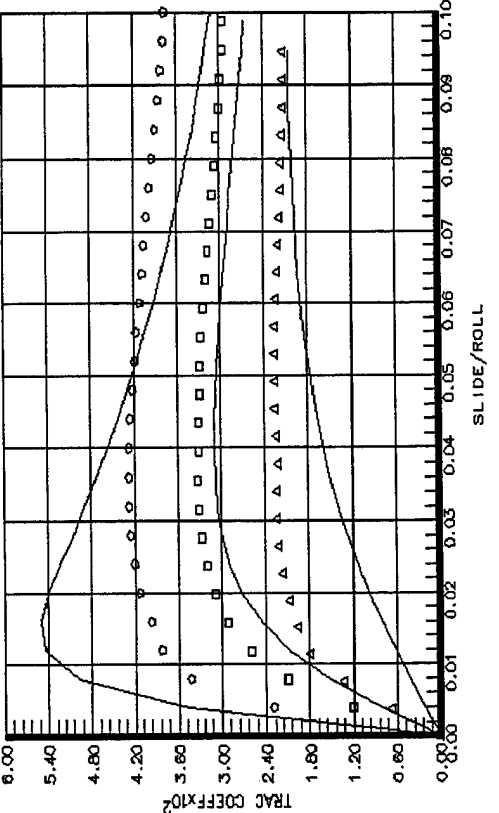
| ALFA* | BETA* |
|--------------------|-----------|
| 15.24M/S 339K #199 | 7.427E-01 |
| 15.24M/S 339K #200 | 7.427E-01 |
| 15.24M/S 339K #201 | 7.427E-01 |



BO 81-288 ApiezonC+5%Bardhal (VacKote)

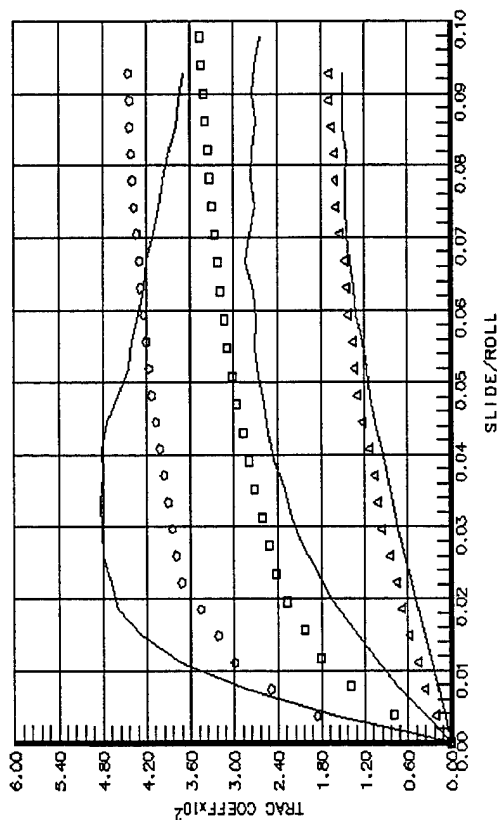
NEWTONIAN MODEL TYPE 1 bo12.dat

| ALFA* | BETA* |
|--------------------|-----------|
| 20.32M/S 339K #202 | 8.265E-01 |
| 20.32M/S 339K #203 | 8.265E-01 |
| 20.32M/S 339K #204 | 8.265E-01 |



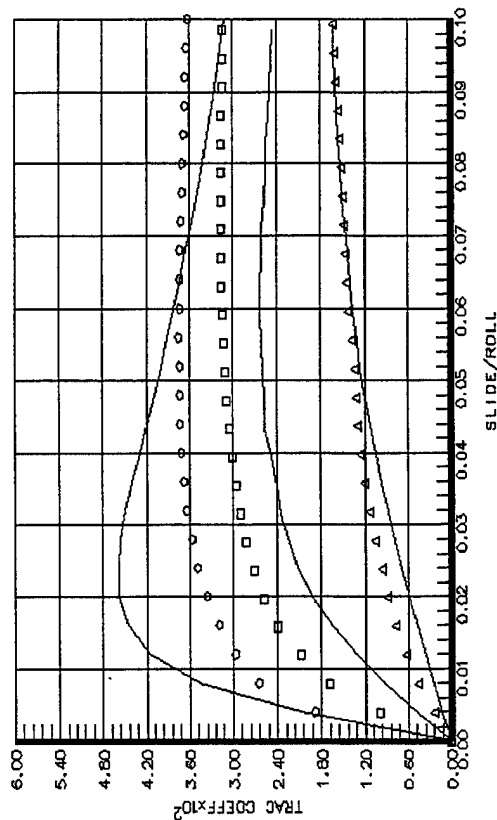
BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1
 B5N 5.08M/S 367K #217 5.084E-01 6.000E-09 2.599E-01 BETA*
 289N 5.08M/S 367K #218 5.084E-01 6.000E-09 2.599E-01 ALFA*
 685N 5.08M/S 367K #219 5.084E-01 6.000E-09 2.599E-01 XMU*
 685N 5.08M/S 367K #219 5.084E-01 6.000E-09 2.599E-01 BETA*



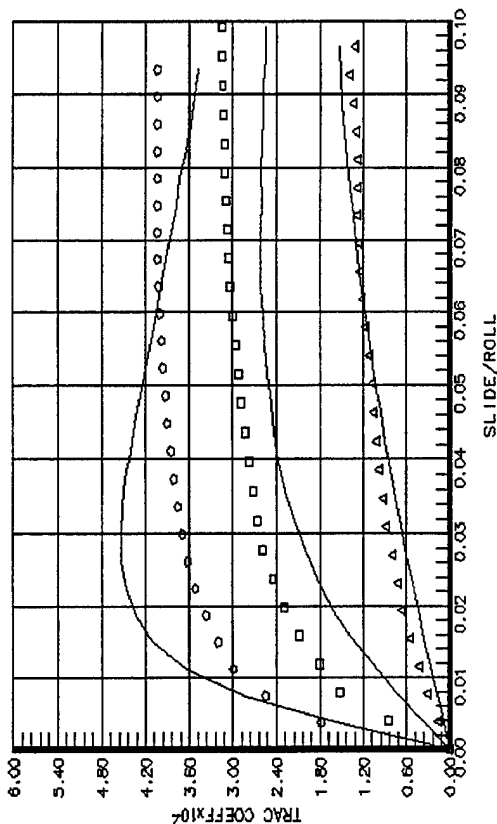
BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1
 B5N 15.24M/S 367K #223 3.723E-01 6.000E-09 8.838E-02 BETA*
 289N 15.24M/S 367K #224 3.723E-01 6.000E-09 8.838E-02 ALFA*
 685N 15.24M/S 367K #225 3.723E-01 6.000E-09 8.838E-02 XMU*
 685N 15.24M/S 367K #225 3.723E-01 6.000E-09 8.838E-02 BETA*



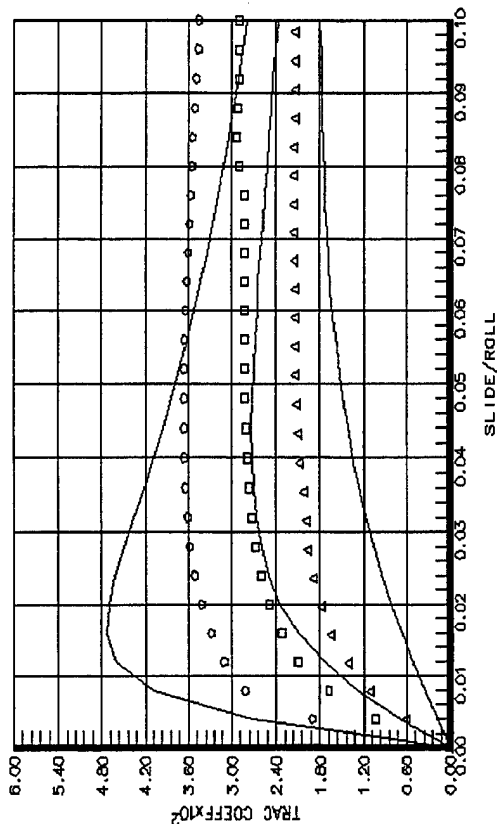
BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1
 B5N 10.16M/S 367K #220 3.643E-01 6.000E-09 8.838E-02 BETA*
 289N 10.16M/S 367K #221 3.643E-01 6.000E-09 8.838E-02 ALFA*
 685N 10.16M/S 367K #222 3.643E-01 6.000E-09 8.838E-02 XMU*
 685N 10.16M/S 367K #222 3.643E-01 6.000E-09 8.838E-02 BETA*



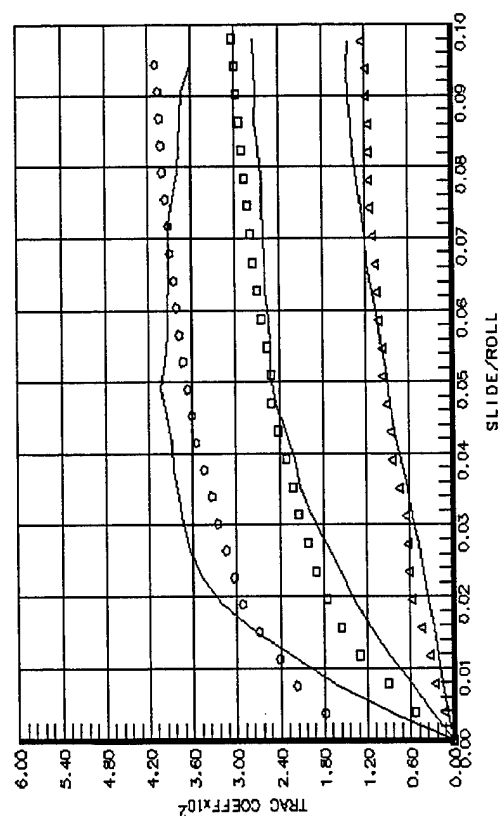
BO 81-288 ApiezonC+5%Bardhal (VacKote)

NEWTONIAN MODEL TYPE 1
 B5N 20.32M/S 367K #226 4.522E-01 6.000E-09 8.118E-02 BETA*
 289N 20.32M/S 367K #227 4.522E-01 6.000E-09 8.118E-02 ALFA*
 685N 20.32M/S 367K #228 4.522E-01 6.000E-09 8.118E-02 XMU*
 685N 20.32M/S 367K #228 4.522E-01 6.000E-09 8.118E-02 BETA*



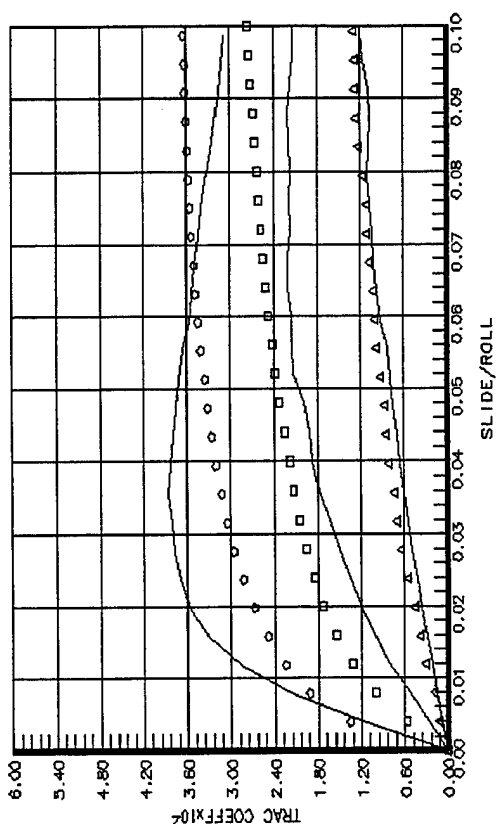
B0 81-288 ApiezonC+5%Bardhal(VacKote)

| I | | TYPE 1 | | bo17.dat | | ALFA* | | BETA* | |
|-----------------|---------|--------|---------|----------|------|-----------|-----------|-----------|--|
| NEWTONIAN MODEL | | | | | | XMU* | | | |
| 1 | 663MPa | 53N | 5.08M/S | 394K | #245 | 2.058E-01 | 8.000E-09 | 3.156E-01 | |
| 2 | 998MPa | 289N | 5.08M/S | 394K | #246 | 2.058E-01 | 8.000E-09 | 3.168E-01 | |
| 3 | 1329MPa | 695N | 5.08M/S | 394K | #247 | 2.058E-01 | 8.000E-09 | 3.168E-01 | |



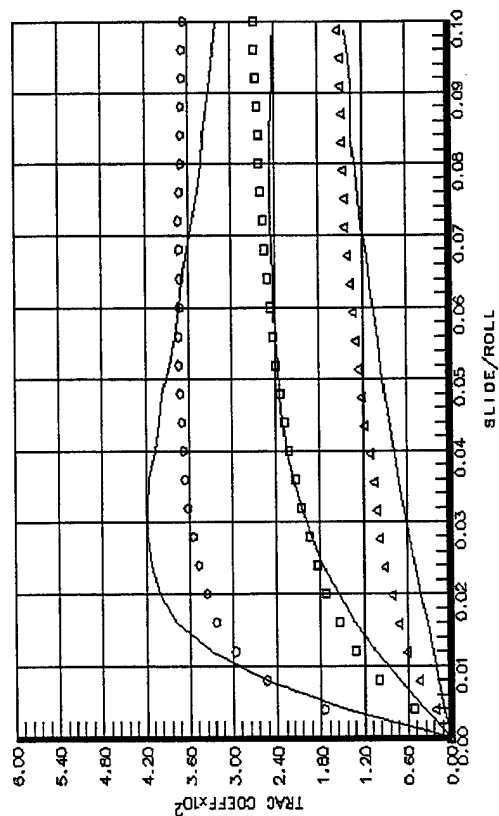
BO 81-288 ApiezonC+5%Bardhal (VacKote)

| NEWTONIAN MODEL | | TYPE I | | DOLDRAL | | XMU* | | ALFA* | | BETA* | |
|-----------------|----------|----------|------|-----------|-----------|-----------|-----------|-------|--|-------|--|
| 55N | 10.16M/S | 394K | #248 | 1.806E-01 | 1.806E-01 | 6.000E-09 | 1.534E-01 | | | | |
| 56NPA | 289N | 10.16M/S | 394K | #249 | 1.806E-01 | 6.000E-09 | 1.534E-01 | | | | |
| 58NPA | 289N | 10.16M/S | 394K | #235 | 1.806E-01 | 6.000E-09 | 1.534E-01 | | | | |
| 132NPA | 665N | 10.16M/S | 394K | #235 | 1.806E-01 | 6.000E-09 | 1.534E-01 | | | | |



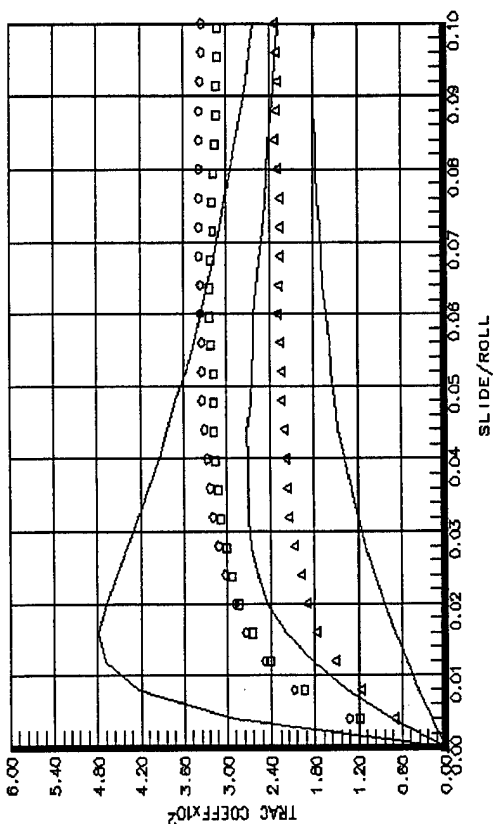
BO 81-288 AplezonC+5%Bardhal (VacKote)

| NEWTONIAN MODEL | | TYPE 1 | | b019.dat | | XMu* | | ALFA* | | BETA* | |
|-----------------|------|-----------|------|----------|-----------|-----------|-----------|-------|--|-------|--|
| 663MPa | 85N | 15.24M/\$ | 394K | #251 | 1.888E-01 | 6.000E-09 | 8.749E-02 | | | | |
| 929MPa | 289N | 15.24M/\$ | 394K | #256 | 1.888E-01 | 8.000E-09 | 8.749E-02 | | | | |
| 1328MPa | 685N | 15.24M/\$ | 394K | #253 | 1.898E-01 | 6.000E-09 | 8.749E-02 | | | | |



BO 81-288 AplezonC+5%Bardhal (VacKote)

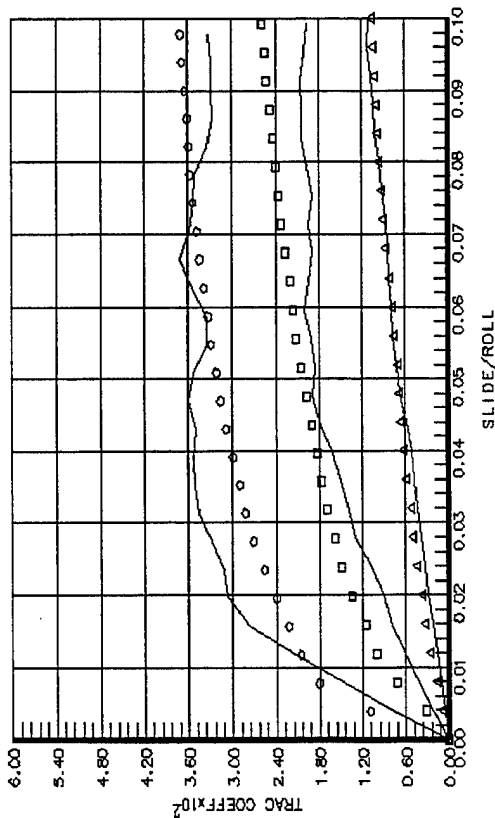
| NEWTONIAN MODEL | TYPICAL | DOSE, MRAD | ALFA* | BETA* |
|-----------------|---------|--------------------|----------|-----------|
| 66MPA | 85N | 20.32M/S 394K #254 | 6.00E-01 | 9.467E-02 |
| 998MPA | 289N | 20.32M/S 394K #255 | 6.00E-01 | 9.467E-02 |
| 1328MPA | 685N | 20.32M/S 394K #238 | 6.00E-01 | 9.467E-02 |



BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo21.dat

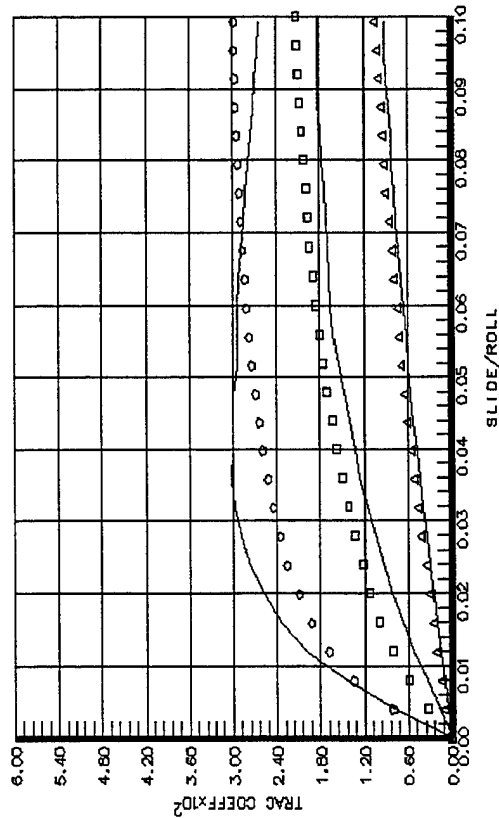
| ALFA* | BETA* |
|-----------|-----------|
| 8.983E-02 | 4.987E-01 |
| 8.983E-02 | 4.987E-01 |
| 8.983E-02 | 4.987E-01 |



BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo23.dat

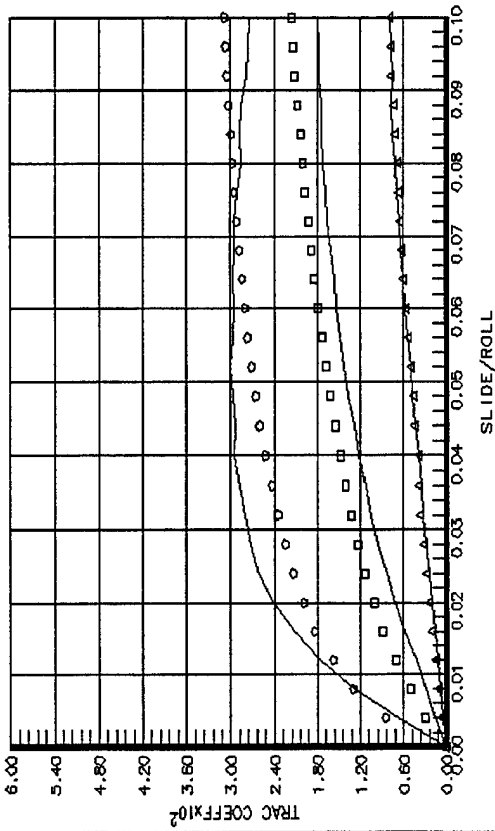
| ALFA* | BETA* |
|-----------|-----------|
| 8.533E-02 | 1.238E-01 |
| 8.533E-02 | 1.238E-01 |
| 8.533E-02 | 1.238E-01 |



BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo22.dat

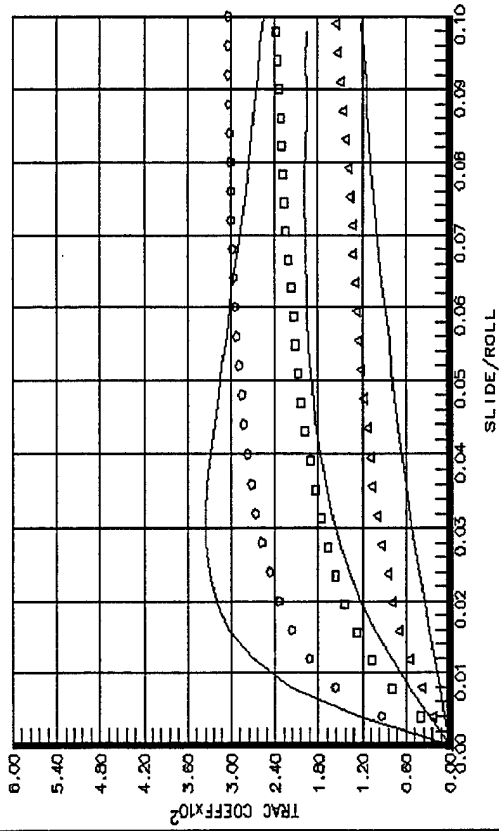
| ALFA* | BETA* |
|-----------|-----------|
| 8.334E-02 | 1.878E-01 |
| 8.334E-02 | 1.878E-01 |
| 8.334E-02 | 1.878E-01 |



BO 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 bo24.dat

| ALFA* | BETA* |
|-----------|-----------|
| 8.996E-02 | 1.022E-01 |
| 8.996E-02 | 1.022E-01 |
| 8.996E-02 | 1.022E-01 |



10. Traction Data Set I: 81-288 Apiezon C + 5% Bardhal (VacKote)/2

Data set name: BQ 81-288 ApiezonC+5%Bardhal(VacKote)
Rolling radii [Disks 1 & 2] (in): 0.75 0.75
Crown radii [Disks 1 & 2] (in): 15.00 13.00

Number of data sets found = 249

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.36E-04 | bq80h2 #1 |
| 2 | 80.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-04 | bq80h2 #2 |
| 3 | 80.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.39E-05 | bq80h2 #3 |
| 4 | 80.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.42E-05 | bq80h2 #4 |
| 5 | 80.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.11E-05 | bq80h2 #5 |
| 6 | 80.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.33E-04 | bq80h2 #6 |
| 7 | 80.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-04 | bq80h2 #7 |
| 8 | 80.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.74E-05 | bq80h2 #8 |
| 9 | 80.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-05 | bq80h2 #9 |
| 10 | 80.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.77E-05 | bq80h2 #10 |
| 11 | 80.00 | 3.48 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.39E-04 | bq80h2 #11 |
| 12 | 80.00 | 8.45 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.64E-04 | bq80h2 #12 |
| 13 | 80.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.66E-05 | bq80h2 #13 |
| 14 | 80.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.93E-05 | bq80h2 #14 |
| 15 | 80.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-05 | bq80h2 #15 |
| 16 | 80.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.43E-03 | bq80l2 #1 |
| 17 | 80.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.75E-04 | bq80l2 #2 |
| 18 | 80.00 | 20.52 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.70E-03 | bq80l2 #3 |
| 19 | 80.00 | 71.64 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.35E-02 | bq80l2 #4 |
| 20 | 80.00 | 171.75 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.31E-03 | bq80l2 #5 |
| 21 | 80.00 | 3.48 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.79E-04 | bq80l2 #6 |
| 22 | 80.00 | 8.45 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-03 | bq80l2 #7 |
| 23 | 80.00 | 20.52 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.48E-04 | bq80l2 #8 |
| 24 | 80.00 | 71.64 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.37E-03 | bq80l2 #9 |
| 25 | 80.00 | 171.75 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-02 | bq80l2 #10 |
| 26 | 80.00 | 3.48 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.01E-04 | bq80l2 #11 |
| 27 | 80.00 | 8.45 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.39E-04 | bq80l2 #12 |
| 28 | 80.00 | 20.52 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-04 | bq80l2 #13 |
| 29 | 80.00 | 71.64 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-03 | bq80l2 #14 |
| 30 | 80.00 | 171.75 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-04 | bq80l2 #15 |
| 31 | 80.00 | 3.48 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.69E-04 | bq80l2 #16 |
| 32 | 80.00 | 8.45 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.35E-05 | bq80l2 #17 |
| 33 | 80.00 | 20.52 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | bq80l2 #18 |
| 34 | 80.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.96E-05 | bq80l2 #19 |
| 35 | 80.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.25E-04 | bq80l2 #20 |
| 36 | 80.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.67E-05 | bq80l2 #21 |
| 37 | 80.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.23E-05 | bq80l2 #22 |
| 38 | 80.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.98E-06 | bq80l2 #23 |
| 39 | 80.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.35E-05 | bq80l2 #24 |
| 40 | 80.00 | 171.75 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.86E-05 | bq80l2 #25 |
| 41 | 80.00 | 3.48 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.44E-04 | bq80l2 #26 |
| 42 | 80.00 | 8.45 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.22E-04 | bq80l2 #27 |
| 43 | 80.00 | 20.52 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.78E-06 | bq80l2 #28 |
| 44 | 80.00 | 71.64 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-05 | bq80l2 #29 |
| 45 | 80.00 | 171.75 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.26E-06 | bq80l2 #30 |
| 46 | 80.00 | 71.64 | 72.00 | 80.00 | 76.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.63E-03 | bq80l2x #1 |
| 47 | 80.00 | 171.75 | 72.00 | 80.00 | 76.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.40E-02 | bq80l2x #2 |
| 48 | 80.00 | 71.64 | 144.00 | 160.00 | 152.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.55E-04 | bq80l2x #3 |
| 49 | 80.00 | 171.75 | 144.00 | 160.00 | 152.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.84E-03 | bq80l2x #4 |
| 50 | 80.00 | 71.64 | 326.00 | 360.00 | 343.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.08E-03 | bq80l2x #5 |

Data set: BQ 81-288 ApiezonC+5%Bardhal(VackKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 80.00 | 171.75 | 326.00 | 360.00 | 343.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.80E-04 | bq80l2x #6 |
| 52 | 80.00 | 3.48 | 72.00 | 80.00 | 76.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.15E-04 | bq80l1x #1 |
| 53 | 80.00 | 8.45 | 72.00 | 80.00 | 76.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.35E-03 | bq80l1x #2 |
| 54 | 80.00 | 20.52 | 72.00 | 80.00 | 76.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.80E-03 | bq80l1x #3 |
| 55 | 80.00 | 3.48 | 144.00 | 160.00 | 152.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.16E-03 | bq80l1x #4 |
| 56 | 80.00 | 8.45 | 144.00 | 160.00 | 152.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.62E-03 | bq80l1x #5 |
| 57 | 80.00 | 20.52 | 144.00 | 160.00 | 152.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.67E-03 | bq80l1x #6 |
| 58 | 80.00 | 3.48 | 326.00 | 360.00 | 343.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.61E-03 | bq80l1x #7 |
| 59 | 80.00 | 8.45 | 326.00 | 360.00 | 343.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-01 | bq80l1x #8 |
| 60 | 80.00 | 20.52 | 326.00 | 360.00 | 343.00 | 200 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.82E-05 | bq80l1x #9 |
| 61 | 100.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.79E-04 | bq100h2 #1 |
| 62 | 100.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-05 | bq100h2 #2 |
| 63 | 100.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.24E-05 | bq100h2 #3 |
| 64 | 100.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.86E-05 | bq100h2 #4 |
| 65 | 100.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.43E-05 | bq100h2 #5 |
| 66 | 100.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 99 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.20E-04 | bq100h2 #6 |
| 67 | 100.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.76E-05 | bq100h2 #7 |
| 68 | 100.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-05 | bq100h2 #8 |
| 69 | 100.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.93E-05 | bq100h2 #9 |
| 70 | 100.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.50E-06 | bq100h2 #10 |
| 71 | 100.00 | 3.48 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | bq100h2 #11 |
| 72 | 100.00 | 8.45 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.58E-04 | bq100h2 #12 |
| 73 | 100.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.29E-05 | bq100h2 #13 |
| 74 | 100.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.59E-05 | bq100h2 #14 |
| 75 | 100.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 80 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.06E-03 | bq100h2 #15 |
| 76 | 100.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.48E-03 | bq100l2 #1 |
| 77 | 100.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.85E-03 | bq100l2 #2 |
| 78 | 100.00 | 20.52 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.10E-03 | bq100l2 #3 |
| 79 | 100.00 | 71.64 | 72.00 | 80.00 | 76.00 | 99 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.36E-03 | bq100l2 #4 |
| 80 | 100.00 | 171.75 | 72.00 | 80.00 | 76.00 | 99 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.17E-02 | bq100l2 #5 |
| 81 | 100.00 | 3.48 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.53E-04 | bq100l2 #6 |
| 82 | 100.00 | 8.45 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.55E-04 | bq100l2 #7 |
| 83 | 100.00 | 20.52 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.87E-04 | bq100l2 #8 |
| 84 | 100.00 | 71.64 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.57E-03 | bq100l2 #9 |
| 85 | 100.00 | 171.75 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.34E-03 | bq100l2 #10 |
| 86 | 100.00 | 3.48 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.66E-05 | bq100l2 #11 |
| 87 | 100.00 | 8.45 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.40E-04 | bq100l2 #12 |
| 88 | 100.00 | 20.52 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-04 | bq100l2 #13 |
| 89 | 100.00 | 71.64 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.96E-05 | bq100l2 #14 |
| 90 | 100.00 | 171.75 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.54E-04 | bq100l2 #15 |
| 91 | 100.00 | 8.45 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.36E-05 | bq100l2 #17 |
| 92 | 100.00 | 20.52 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.62E-05 | bq100l2 #18 |
| 93 | 100.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.87E-04 | bq100l2 #19 |
| 94 | 100.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.38E-05 | bq100l2 #20 |
| 95 | 100.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-04 | bq100l2 #21 |
| 96 | 100.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.91E-05 | bq100l2 #22 |
| 97 | 100.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.23E-06 | bq100l2 #23 |
| 98 | 100.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.81E-05 | bq100l2 #24 |
| 99 | 100.00 | 171.75 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.35E-06 | bq100l2 #25 |
| 100 | 100.00 | 3.48 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-04 | bq100l2 #26 |
| 101 | 100.00 | 8.45 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.84E-05 | bq100l2 #27 |
| 102 | 100.00 | 20.52 | 2431.00 | 2687.00 | 2559.00 | 71 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.41E-03 | bq100l2 #28 |
| 103 | 150.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.29E-04 | bq150h2 #1 |
| 104 | 150.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.20E-05 | bq150h2 #2 |
| 105 | 150.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.16E-05 | bq150h2 #3 |
| 106 | 150.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.96E-05 | bq150h2 #4 |
| 107 | 150.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.99E-05 | bq150h2 #5 |
| 108 | 150.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.51E-04 | bq150h2 #6 |
| 109 | 150.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-05 | bq150h2 #7 |
| 110 | 150.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.02E-06 | bq150h2 #8 |
| 111 | 150.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 99 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.51E-05 | bq150h2 #9 |
| 112 | 150.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.33E-05 | bq150h2 #10 |
| 113 | 150.00 | 3.48 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.74E-04 | bq150h2 #11 |
| 114 | 150.00 | 8.45 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.42E-05 | bq150h2 #12 |
| 115 | 150.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-05 | bq150h2 #13 |
| 116 | 150.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.83E-06 | bq150h2 #14 |
| 117 | 150.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.07E-05 | bq150h2 #15 |
| 118 | 150.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.91E-03 | bq150l2 #1 |
| 119 | 150.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-03 | bq150l2 #2 |
| 120 | 150.00 | 20.52 | 72.00 | 80.00 | 76.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.08E-01 | bq150l2 #3 |

Data set: BQ 81-288 ApiezonC+5%Bardhal(VacKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 150.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-04 | bq150l2 #19 |
| 122 | 150.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.16E-04 | bq150l2 #20 |
| 123 | 150.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.82E-04 | bq150l2 #21 |
| 124 | 150.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.14E-05 | bq150l2 #22 |
| 125 | 150.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.26E-06 | bq150l2 #23 |
| 126 | 150.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 55 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.61E-02 | bq150l2 #24 |
| 127 | 200.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.84E-04 | bq200h2 #1 |
| 128 | 200.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-05 | bq200h2 #2 |
| 129 | 200.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.93E-06 | bq200h2 #3 |
| 130 | 200.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.99E-05 | bq200h2 #4 |
| 131 | 200.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-04 | bq200h2 #5 |
| 132 | 200.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-03 | bq200h2 #6 |
| 133 | 200.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.84E-05 | bq200h2 #7 |
| 134 | 200.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.67E-04 | bq200h2 #8 |
| 135 | 200.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.51E-06 | bq200h2 #9 |
| 136 | 200.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-05 | bq200h2 #10 |
| 137 | 200.00 | 3.48 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-04 | bq200h2 #11 |
| 138 | 200.00 | 8.45 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.57E-05 | bq200h2 #12 |
| 139 | 200.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-05 | bq200h2 #13 |
| 140 | 200.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.71E-05 | bq200h2 #14 |
| 141 | 200.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.14E-05 | bq200h2 #15 |
| 142 | 200.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.92E-03 | bq200l2 #1 |
| 143 | 200.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.79E-02 | bq200l2 #2 |
| 144 | 200.00 | 20.52 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.61E-02 | bq200l2 #3 |
| 145 | 200.00 | 71.64 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.88E-02 | bq200l2 #4 |
| 146 | 200.00 | 171.75 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.68E-03 | bq200l2 #5 |
| 147 | 200.00 | 3.48 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.15E-04 | bq200l2 #6 |
| 148 | 200.00 | 8.45 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.99E-03 | bq200l2 #7 |
| 149 | 200.00 | 20.52 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.75E-03 | bq200l2 #8 |
| 150 | 200.00 | 71.64 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.20E-03 | bq200l2 #9 |
| 151 | 200.00 | 171.75 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.65E-03 | bq200l2 #10 |
| 152 | 200.00 | 3.48 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-04 | bq200l2 #11 |
| 153 | 200.00 | 8.45 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.95E-04 | bq200l2 #12 |
| 154 | 200.00 | 20.52 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.06E-05 | bq200l2 #13 |
| 155 | 200.00 | 71.64 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.86E-04 | bq200l2 #14 |
| 156 | 200.00 | 171.75 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-04 | bq200l2 #15 |
| 157 | 200.00 | 3.48 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.16E-05 | bq200l2 #16 |
| 158 | 200.00 | 8.45 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-05 | bq200l2 #17 |
| 159 | 200.00 | 20.52 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.22E-06 | bq200l2 #18 |
| 160 | 200.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | bq200l2 #19 |
| 161 | 200.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.22E-05 | bq200l2 #20 |
| 162 | 200.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.96E-05 | bq200l2 #21 |
| 163 | 200.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.16E-05 | bq200l2 #22 |
| 164 | 200.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.37E-06 | bq200l2 #23 |
| 165 | 200.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.02E-05 | bq200l2 #24 |
| 166 | 200.00 | 171.75 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.15E-05 | bq200l2 #25 |
| 167 | 200.00 | 3.48 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.33E-04 | bq200l2 #26 |
| 168 | 200.00 | 8.45 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.63E-04 | bq200l2 #27 |
| 169 | 200.00 | 20.52 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-05 | bq200l2 #28 |
| 170 | 200.00 | 71.64 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.04E-07 | bq200l2 #29 |
| 171 | 200.00 | 171.75 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.54E-05 | bq200l2 #30 |
| 172 | 250.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-04 | bq250h2 #1 |
| 173 | 250.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.04E-05 | bq250h2 #2 |
| 174 | 250.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.84E-06 | bq250h2 #3 |
| 175 | 250.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.68E-05 | bq250h2 #4 |
| 176 | 250.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-05 | bq250h2 #5 |
| 177 | 250.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.48E-04 | bq250h2 #6 |
| 178 | 250.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.19E-04 | bq250h2 #7 |
| 179 | 250.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.06E-06 | bq250h2 #8 |
| 180 | 250.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-06 | bq250h2 #9 |
| 181 | 250.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-05 | bq250h2 #10 |
| 182 | 250.00 | 3.48 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.48E-04 | bq250h2 #11 |
| 183 | 250.00 | 8.45 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.68E-05 | bq250h2 #12 |
| 184 | 250.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.56E-05 | bq250h2 #13 |
| 185 | 250.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.09E-06 | bq250h2 #14 |
| 186 | 250.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.61E-06 | bq250h2 #15 |
| 187 | 250.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.22E-03 | bq250l2 #1 |
| 188 | 250.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.73E-02 | bq250l2 #2 |
| 189 | 250.00 | 20.52 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.62E-02 | bq250l2 #3 |
| 190 | 250.00 | 71.64 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.41E-03 | bq250l2 #4 |

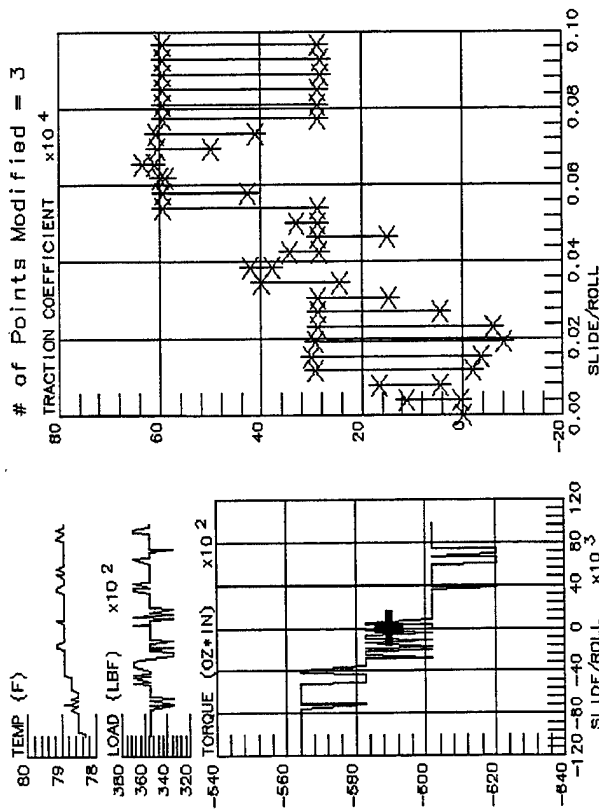
Data set: BQ 81-288 ApiezonC+5%Bardhal(VacKote)continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 191 | 250.00 | 171.75 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.54E-01 | bq25012 #5 |
| 192 | 250.00 | 3.48 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-02 | bq25012 #6 |
| 193 | 250.00 | 8.45 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-03 | bq25012 #7 |
| 194 | 250.00 | 20.52 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.03E-03 | bq25012 #8 |
| 195 | 250.00 | 71.64 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-02 | bq25012 #9 |
| 196 | 250.00 | 171.75 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.17E-03 | bq25012 #10 |
| 197 | 250.00 | 3.48 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.58E-03 | bq25012 #11 |
| 198 | 250.00 | 8.45 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.05E-05 | bq25012 #12 |
| 199 | 250.00 | 20.52 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.92E-05 | bq25012 #13 |
| 200 | 250.00 | 71.64 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.43E-04 | bq25012 #14 |
| 201 | 250.00 | 171.75 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.64E-04 | bq25012 #15 |
| 202 | 250.00 | 3.48 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-04 | bq25012 #16 |
| 203 | 250.00 | 8.45 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.47E-05 | bq25012 #17 |
| 204 | 250.00 | 20.52 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.48E-06 | bq25012 #18 |
| 205 | 250.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-05 | bq25012 #19 |
| 206 | 250.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.98E-04 | bq25012 #20 |
| 207 | 250.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.66E-05 | bq25012 #21 |
| 208 | 250.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.86E-05 | bq25012 #22 |
| 209 | 250.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.91E-06 | bq25012 #23 |
| 210 | 250.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.29E-06 | bq25012 #24 |
| 211 | 250.00 | 171.75 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.19E-05 | bq25012 #25 |
| 212 | 250.00 | 3.48 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.10E-04 | bq25012 #26 |
| 213 | 250.00 | 8.45 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.56E-05 | bq25012 #27 |
| 214 | 250.00 | 20.52 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.17E-06 | bq25012 #28 |
| 215 | 250.00 | 71.64 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.42E-06 | bq25012 #29 |
| 216 | 250.00 | 171.75 | 2431.00 | 2687.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.27E-05 | bq25012 #30 |
| 217 | 300.00 | 3.48 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.69E-05 | bq300h2 #1 |
| 218 | 300.00 | 8.45 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.27E-05 | bq300h2 #2 |
| 219 | 300.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 76 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.84E-06 | bq300h2 #3 |
| 220 | 300.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.92E-05 | bq300h2 #4 |
| 221 | 300.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.34E-06 | bq300h2 #5 |
| 222 | 300.00 | 3.48 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-04 | bq300h2 #6 |
| 223 | 300.00 | 8.45 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.55E-05 | bq300h2 #7 |
| 224 | 300.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-05 | bq300h2 #8 |
| 225 | 300.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 79 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.47E-04 | bq300h2 #9 |
| 226 | 300.00 | 3.48 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.63E-03 | bq30012 #1 |
| 227 | 300.00 | 8.45 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.06E-02 | bq30012 #2 |
| 228 | 300.00 | 20.52 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.77E-02 | bq30012 #3 |
| 229 | 300.00 | 71.64 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-02 | bq30012 #4 |
| 230 | 300.00 | 171.75 | 72.00 | 80.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-02 | bq30012 #5 |
| 231 | 300.00 | 3.48 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.71E-04 | bq30012 #6 |
| 232 | 300.00 | 8.45 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.95E-03 | bq30012 #7 |
| 233 | 300.00 | 20.52 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.38E-03 | bq30012 #8 |
| 234 | 300.00 | 71.64 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.53E-03 | bq30012 #9 |
| 235 | 300.00 | 171.75 | 144.00 | 160.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.13E-02 | bq30012 #10 |
| 236 | 300.00 | 3.48 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.88E-03 | bq30012 #11 |
| 237 | 300.00 | 8.45 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.48E-04 | bq30012 #12 |
| 238 | 300.00 | 20.52 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.56E-04 | bq30012 #13 |
| 239 | 300.00 | 71.64 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.12E-04 | bq30012 #14 |
| 240 | 300.00 | 171.75 | 326.00 | 360.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.30E-04 | bq30012 #15 |
| 241 | 300.00 | 3.48 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.50E-05 | bq30012 #16 |
| 242 | 300.00 | 8.45 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.68E-05 | bq30012 #17 |
| 243 | 300.00 | 20.52 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.39E-05 | bq30012 #18 |
| 244 | 300.00 | 71.64 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.19E-05 | bq30012 #19 |
| 245 | 300.00 | 171.75 | 617.00 | 682.00 | 649.50 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.15E-05 | bq30012 #20 |
| 246 | 300.00 | 3.48 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.08E-05 | bq30012 #21 |
| 247 | 300.00 | 8.45 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.12E-05 | bq30012 #22 |
| 248 | 300.00 | 20.52 | 1197.00 | 1323.00 | 1260.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.79E-06 | bq30012 #23 |
| 249 | 300.00 | 71.64 | 1197.00 | 1323.00 | 1260.00 | 79 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-03 | bq30012 #24 |

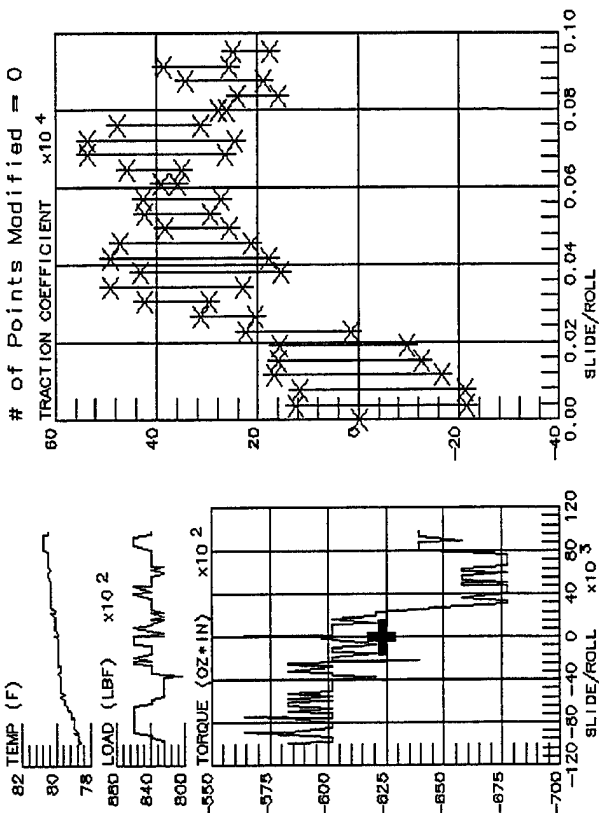
Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-------------|
| bq1.dat | 80.00 | 650.00 | 33 34 35 |
| bq2.dat | 80.00 | 1260.00 | 38 39 40 |
| bq3.dat | 80.00 | 5080.00 | 3 4 5 |
| bq4.dat | 80.00 | 7639.00 | 8 9 10 |
| bq5.dat | 80.00 | 10198.00 | 13 14 15 |
| bq6.dat | 100.00 | 650.00 | 92 93 94 |
| bq7.dat | 100.00 | 1260.00 | 97 98 99 |
| bq8.dat | 100.00 | 5080.00 | 63 64 65 |
| bq9.dat | 100.00 | 7639.00 | 68 69 70 |
| bq10.dat | 100.00 | 10198.00 | 73 74 75 |
| bq11.dat | 150.00 | 650.00 | 121 122 |
| bq12.dat | 150.00 | 1260.00 | 125 126 |
| bq13.dat | 150.00 | 5080.00 | 105 106 107 |
| bq14.dat | 150.00 | 7639.00 | 110 111 112 |
| bq15.dat | 150.00 | 10198.00 | 115 116 117 |
| bq16.dat | 200.00 | 650.00 | 159 160 161 |
| bq17.dat | 200.00 | 1260.00 | 164 165 166 |
| bq18.dat | 200.00 | 5080.00 | 129 130 131 |
| bq19.dat | 200.00 | 7639.00 | 134 135 136 |
| bq20.dat | 200.00 | 10198.00 | 139 140 141 |
| bq21.dat | 250.00 | 650.00 | 204 205 206 |
| bq22.dat | 250.00 | 1260.00 | 209 210 211 |
| bq23.dat | 250.00 | 5080.00 | 174 175 176 |
| bq24.dat | 250.00 | 7639.00 | 179 180 181 |
| bq25.dat | 250.00 | 10198.00 | 184 185 186 |
| bq26.dat | 300.00 | 650.00 | 243 244 245 |
| bq27.dat | 300.00 | 1260.00 | 248 249 |
| bq28.dat | 300.00 | 5080.00 | 219 220 221 |
| bq29.dat | 300.00 | 7639.00 | 224 225 |

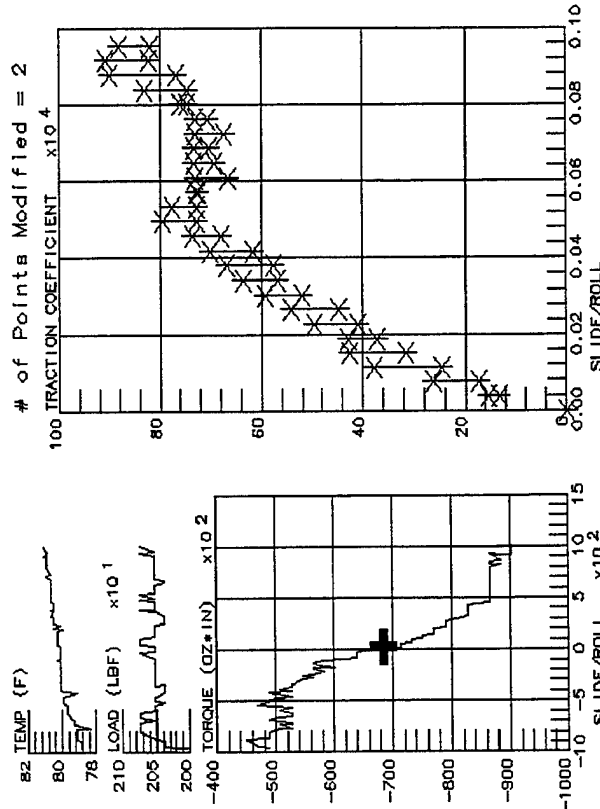
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #1
80F 31LBF 5080RPM 1 FILE: bq80h2



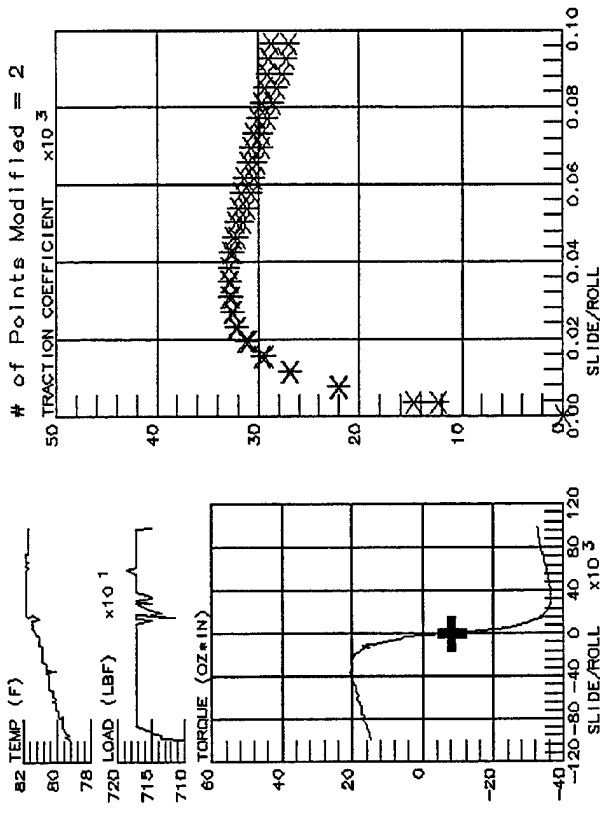
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #2
80F 8LBF 5080RPM 2 FILE: bq80h2



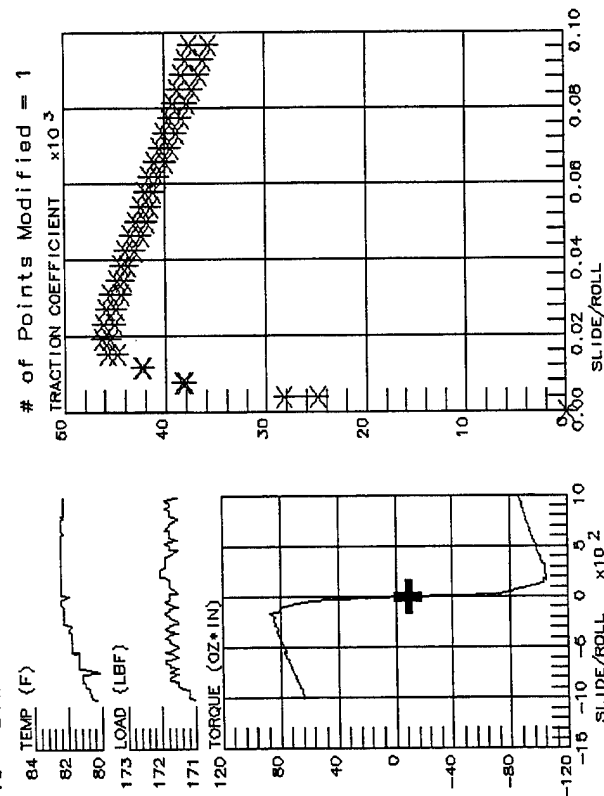
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #3
80F 21LBF 5080RPM 3 FILE: bq80h2



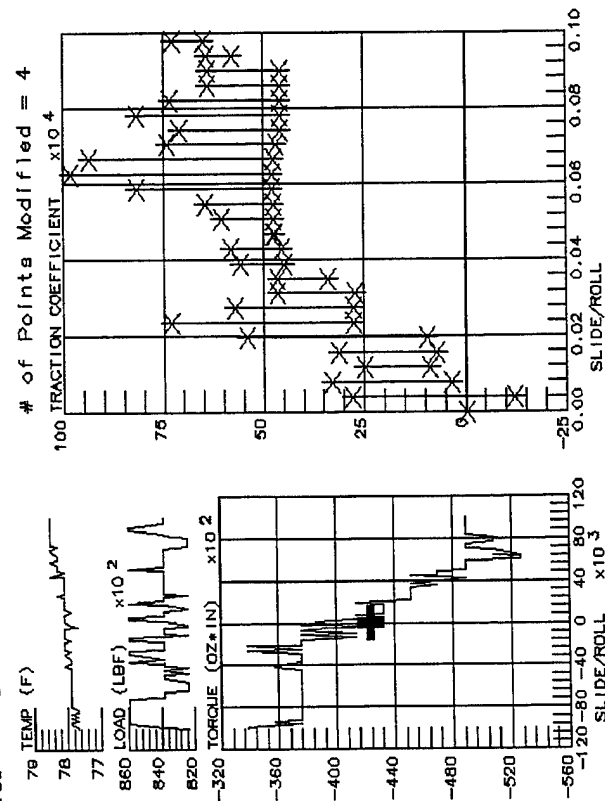
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #4
80F 72LBF 5080RPM 4 FILE: bq80h2



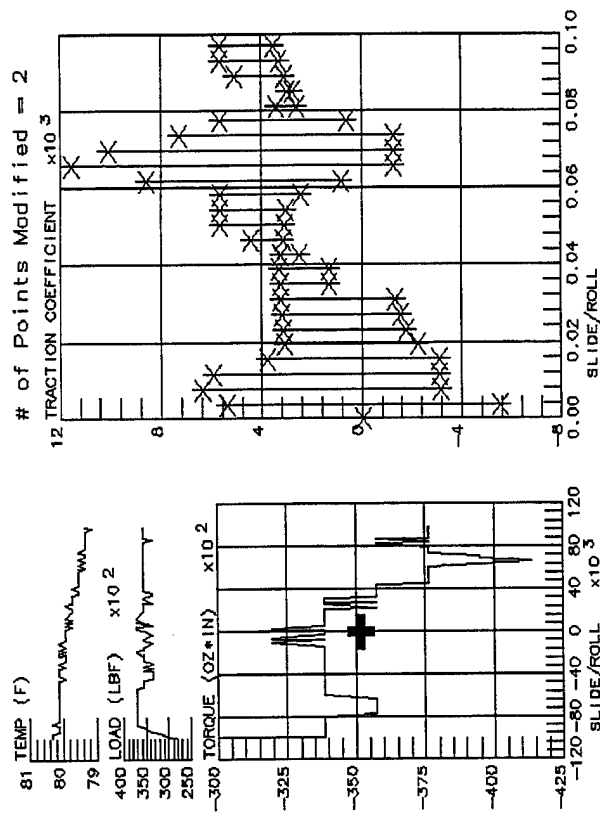
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #5
80F 172LBF 5080RPM 5 FILE: bq80h2



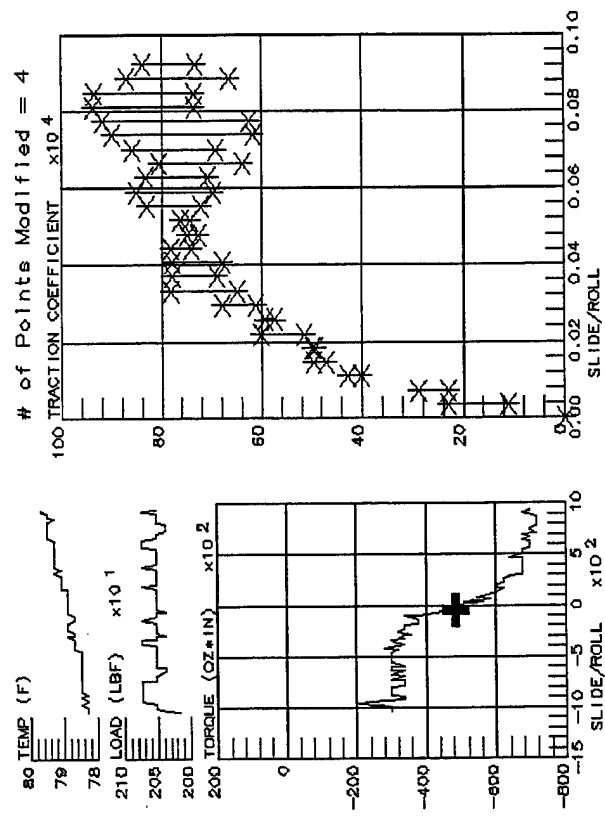
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #7
80F 81LBF 7639RPM 7 FILE: bq80h2



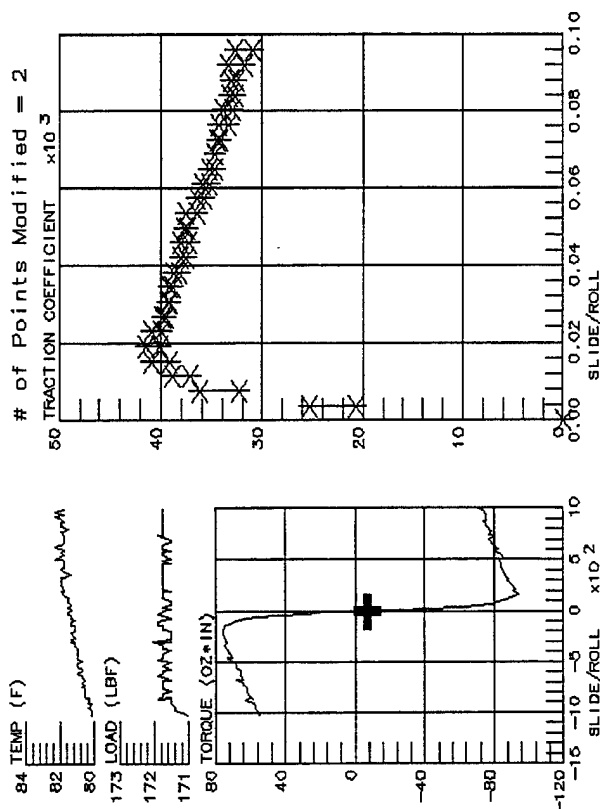
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #8
80F 3LBF 7639RPM 8 FILE: bq80h2



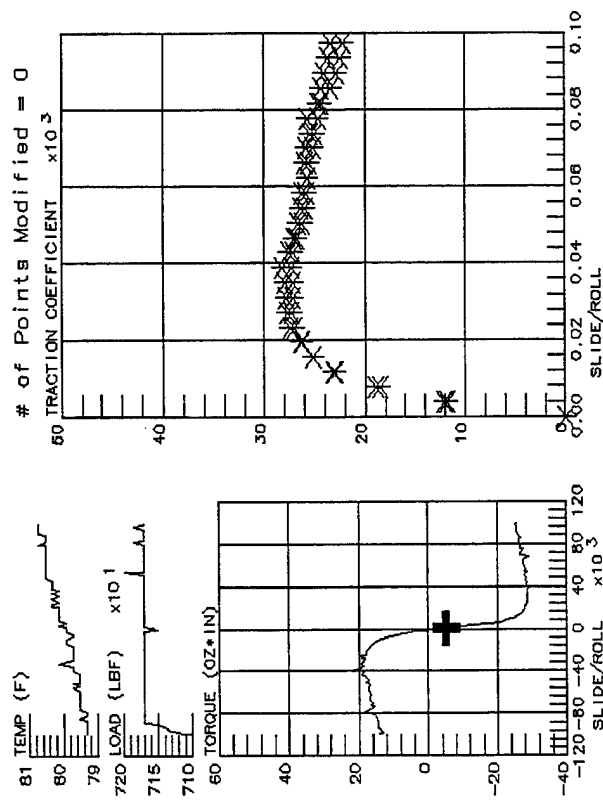
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #8
80F 21LBF 7639RPM 8 FILE: bq80h2



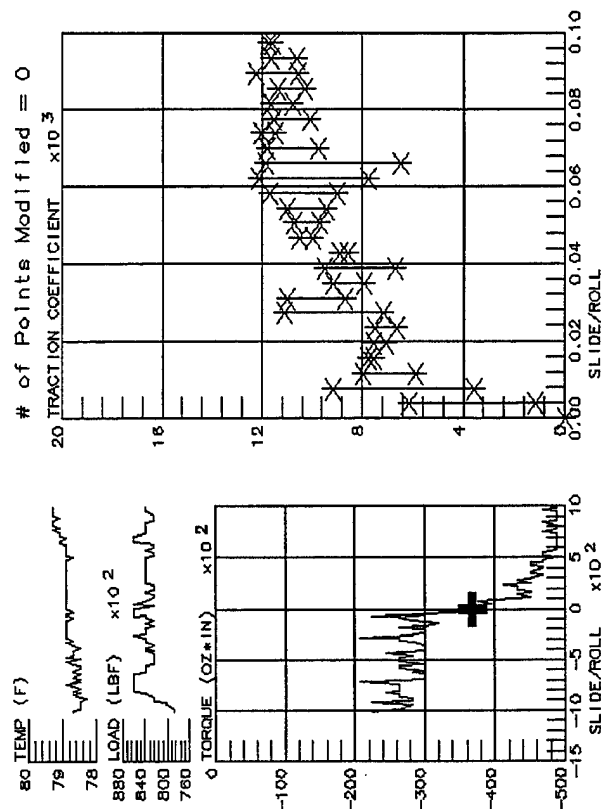
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #10
80F 172LBF 7639RPM 10 FILE: bq80h2



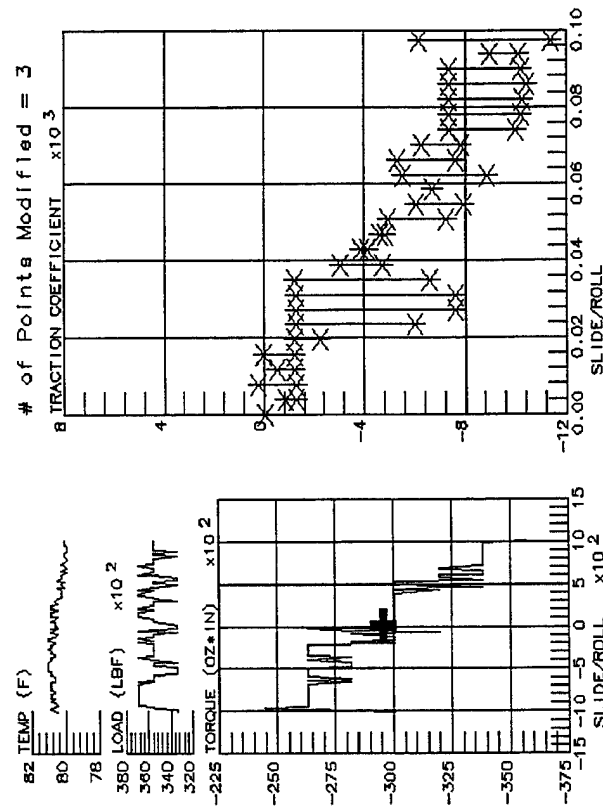
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #9
80F 72LBF 7639RPM 9 FILE: bq80h2



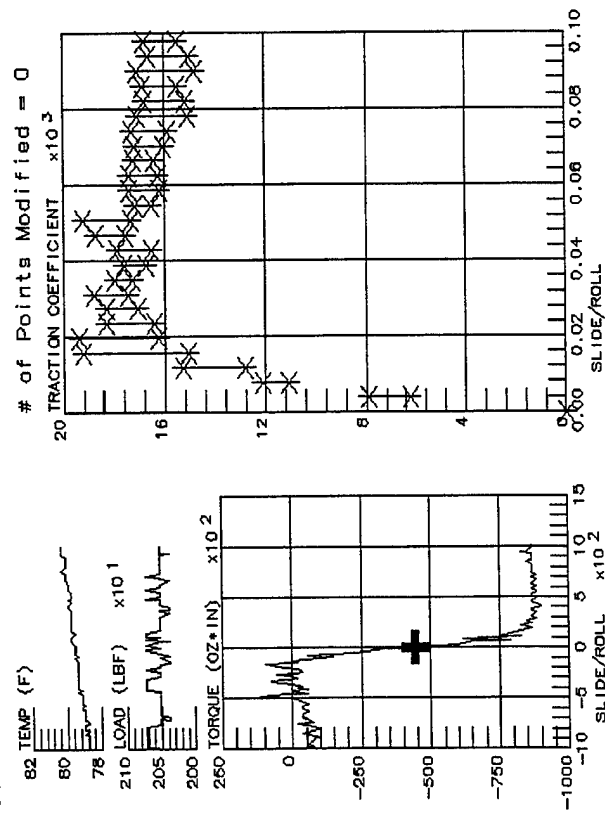
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #12
80F 8LBF 10198RPM 12 FILE: bq80h2



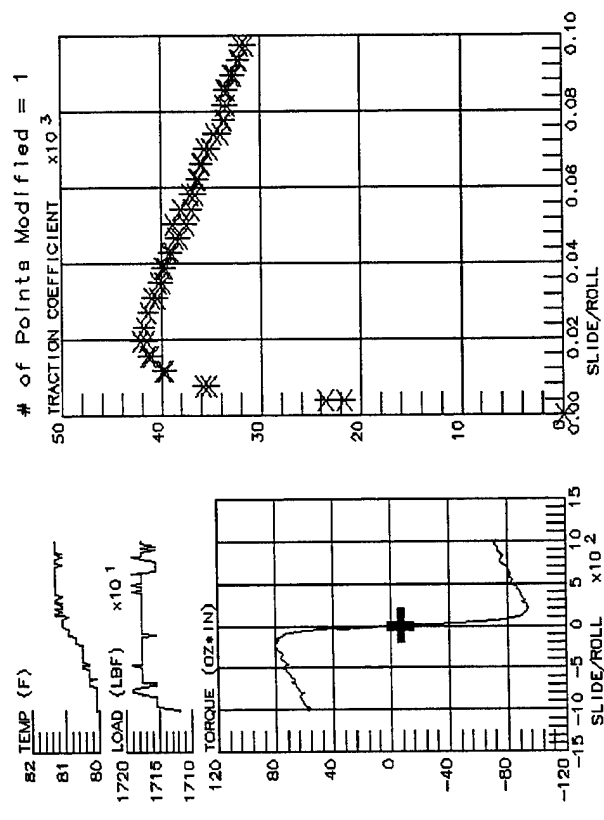
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #11
80F 3LBF 10198RPM 11 FILE: bq80h2



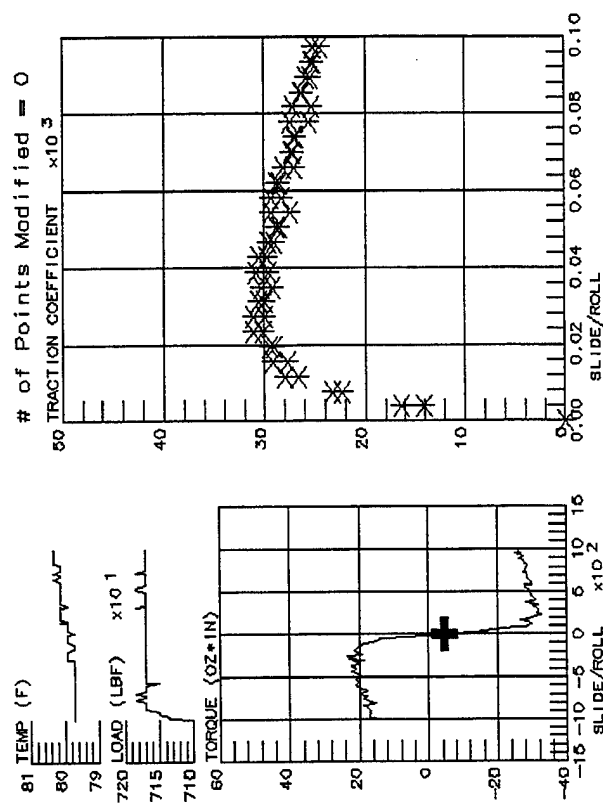
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #13
80F 21LBF 10198RPM 13 FILE: bq80b2



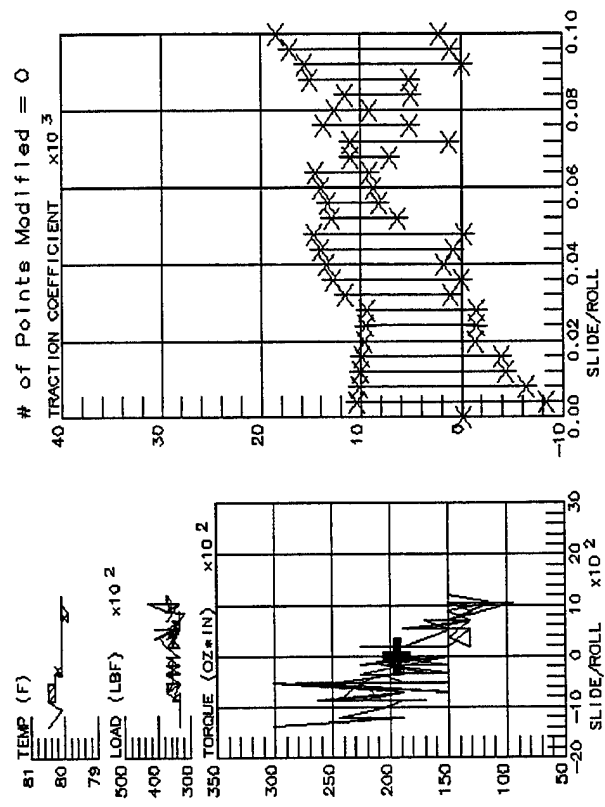
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #15
80F 172LBF 10198RPM 15 FILE: bq80b2



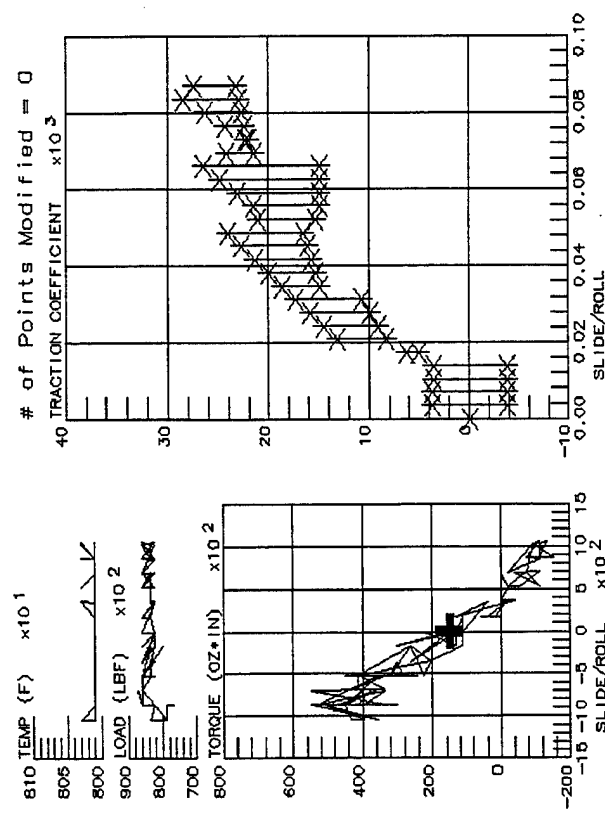
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #14
80F 72LBF 10198RPM 14 FILE: bq80b2



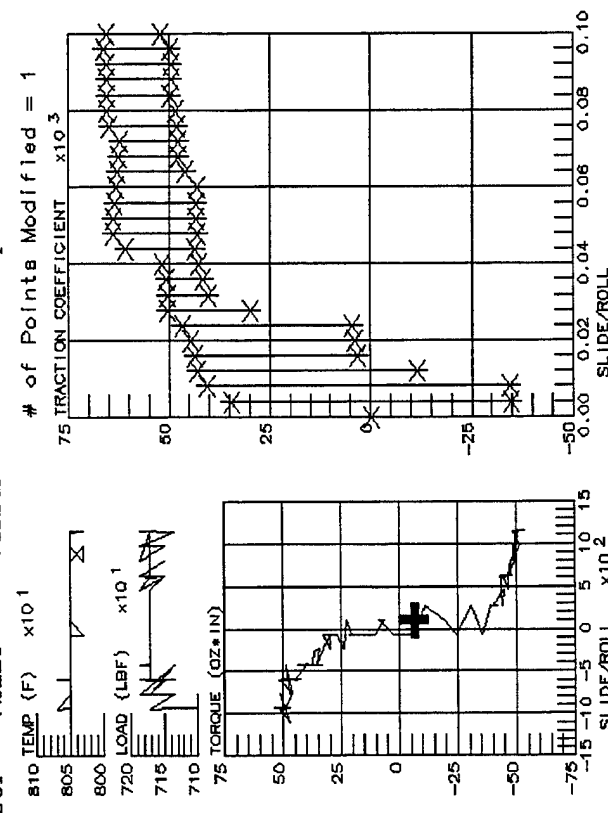
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #16
80F 3LBF 76RPM 1 FILE: bq80i2



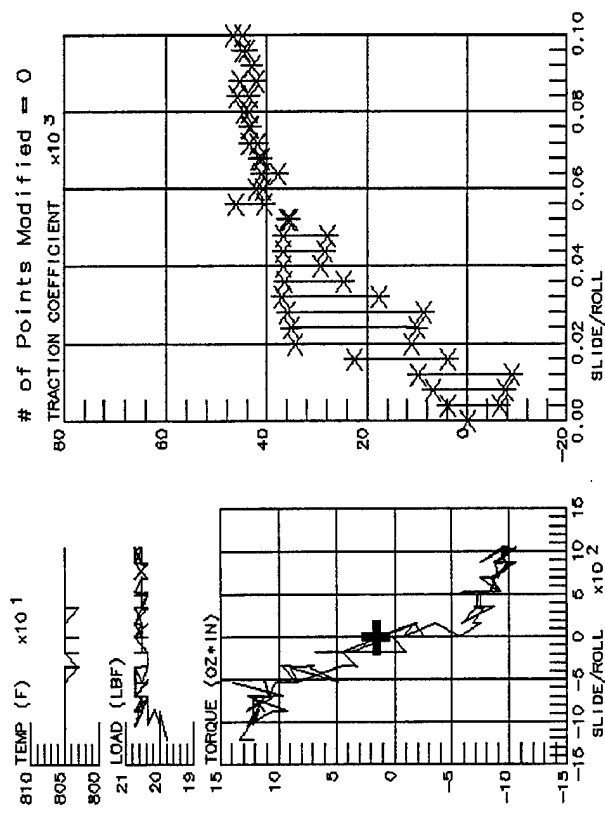
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #17
80F 8LBF 76RPM 2 FILE: bq8012



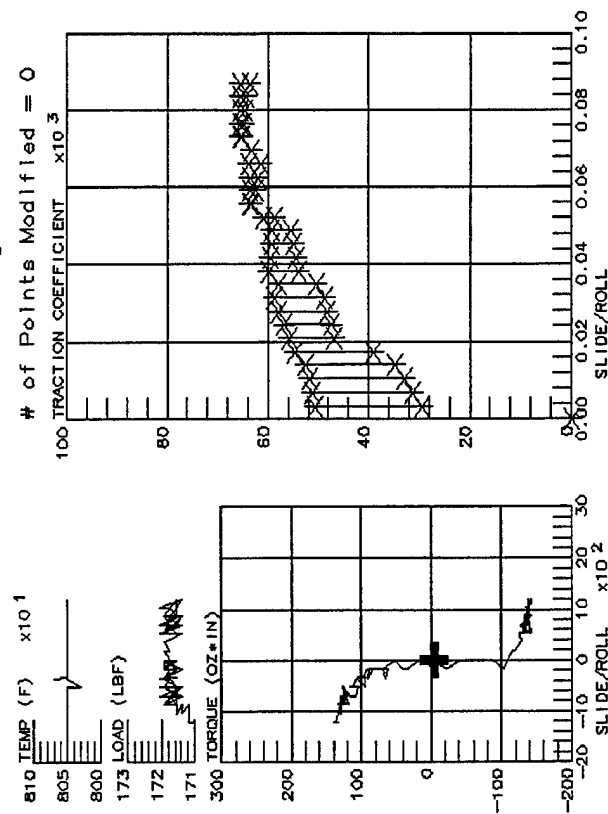
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #19
80F 72LBF 76RPM 4 FILE: bq8012



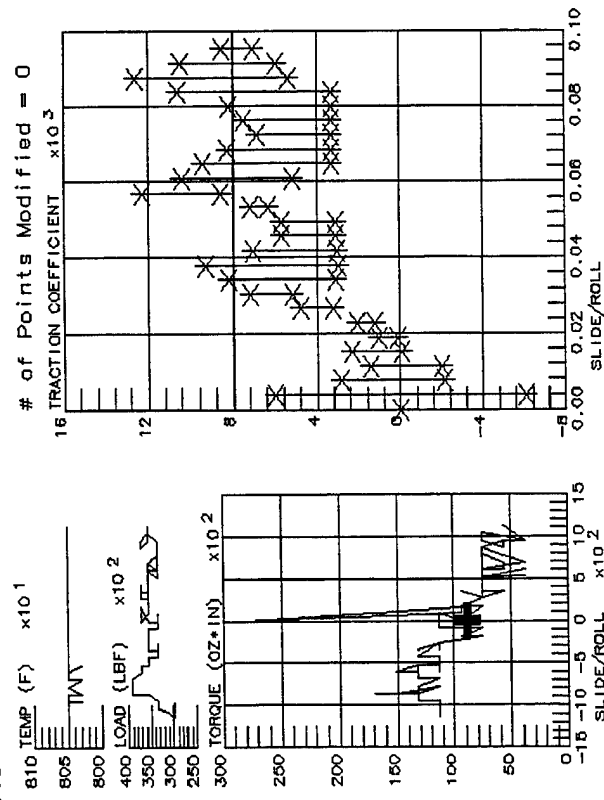
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #18
80F 21LBF 76RPM 3 FILE: bq8012



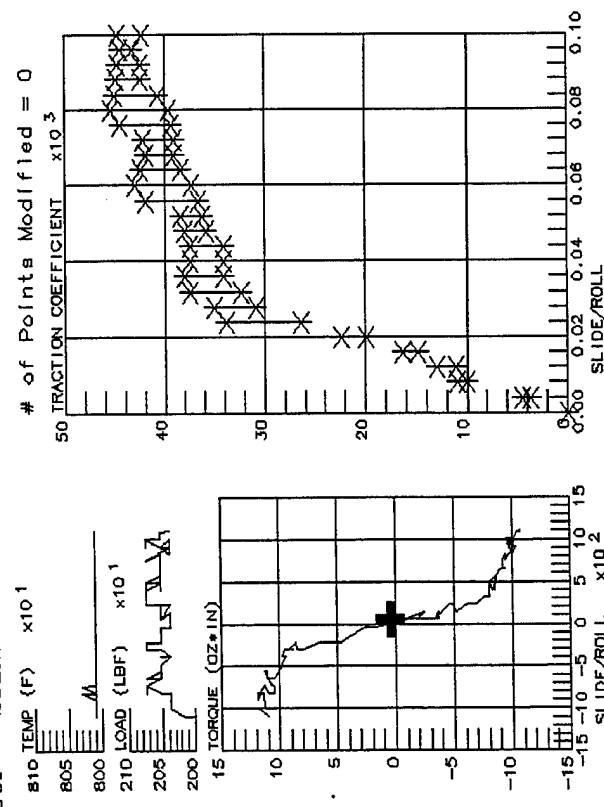
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #20
80F 172LBF 76RPM 5 FILE: bq8012



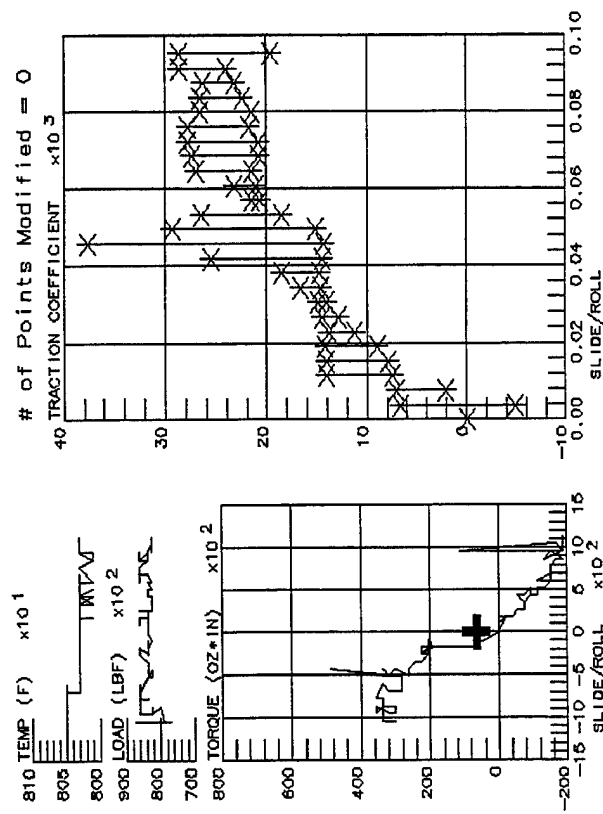
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #21
80F 3LBF 152RPM 8 FILE: bq8012



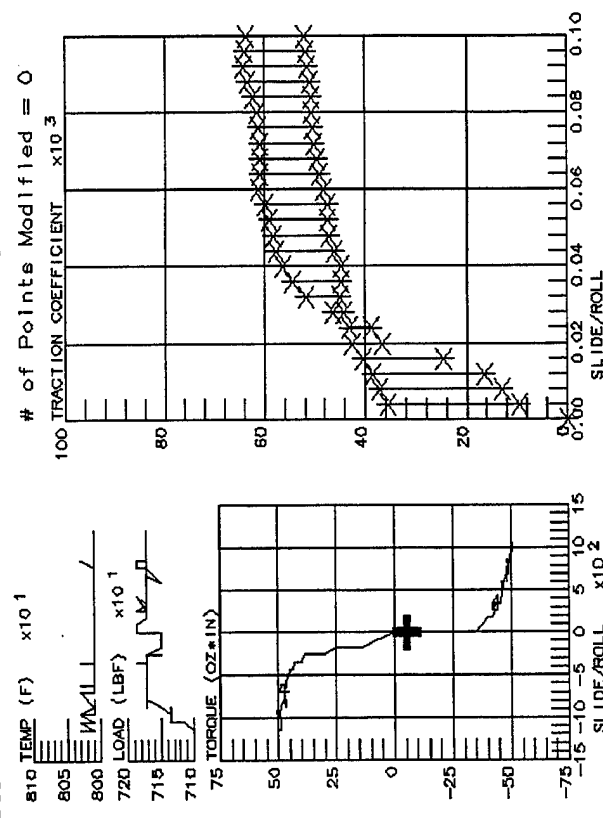
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #23
80F 21LBF 152RPM 8 FILE: bq8012



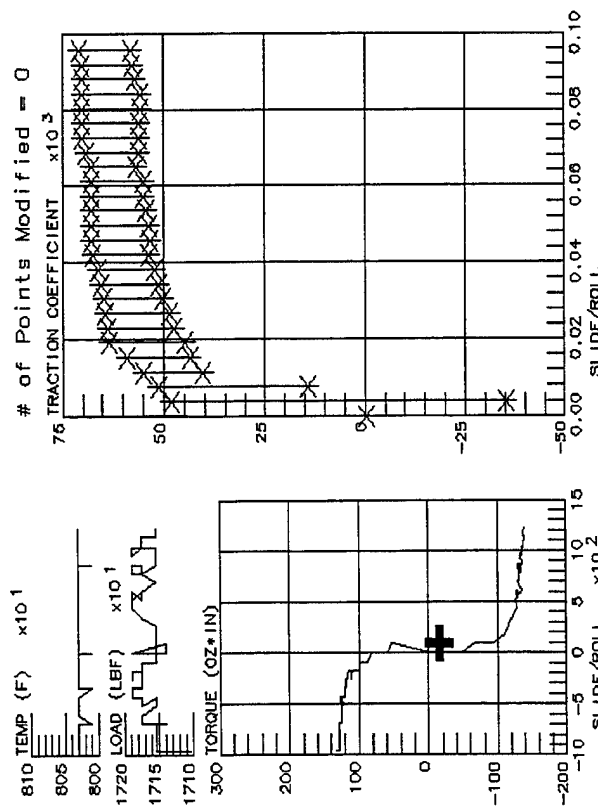
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #22
80F 8LBF 152RPM 7 FILE: bq8012



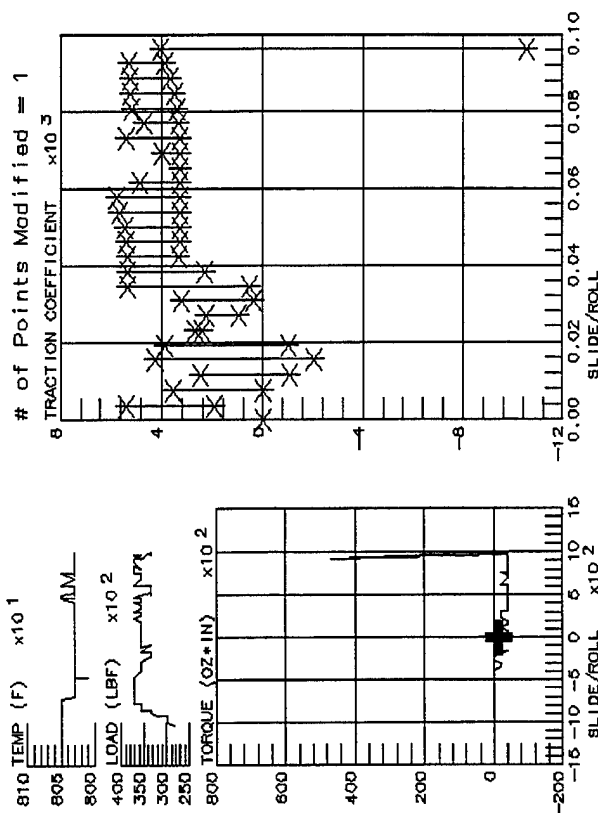
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #24
80F 72LBF 152RPM 9 FILE: bq8012



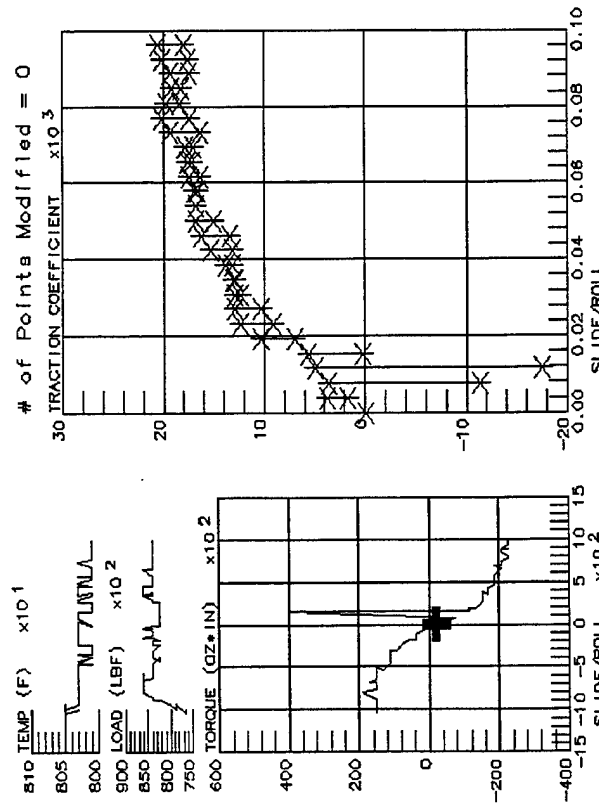
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #25
80F 172LBF 152RPM 10 FILE: bq8012



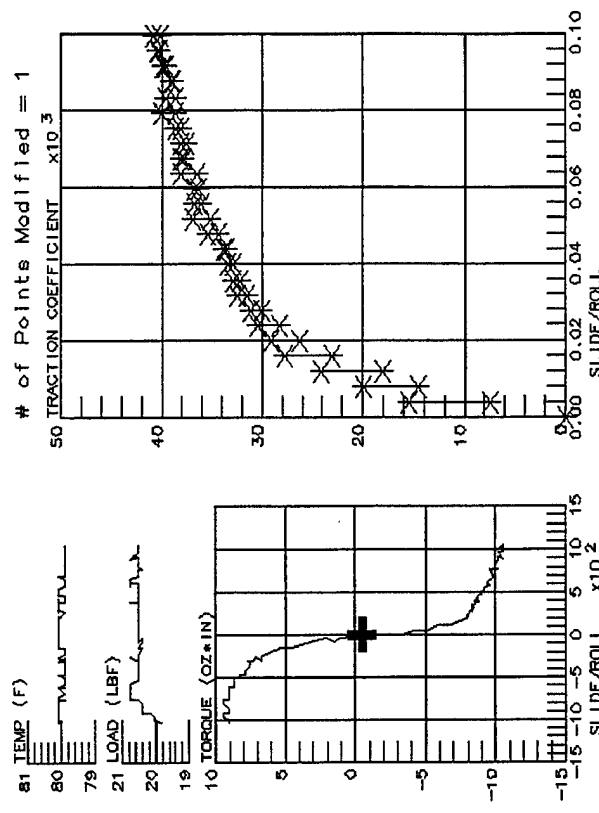
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #28
80F 3LBF 343RPM 11 FILE: bq8012



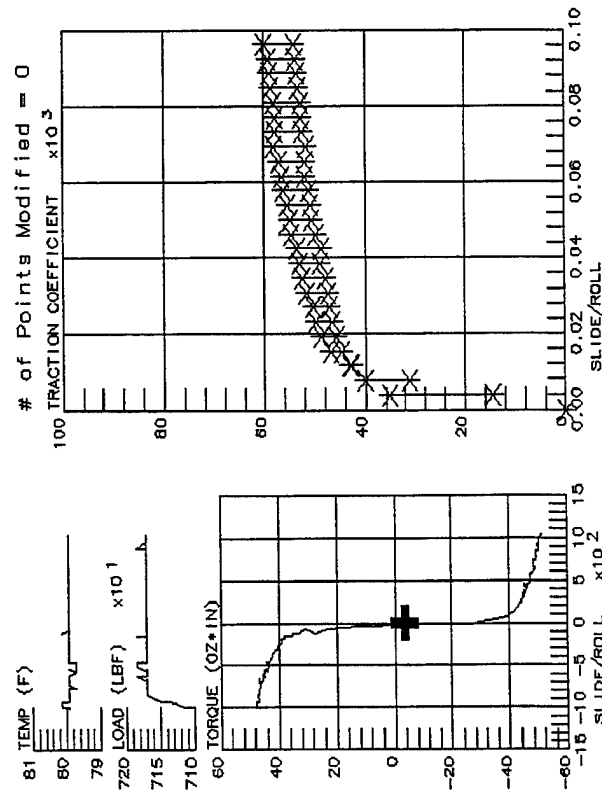
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #27
80F 8LBF 343RPM 12 FILE: bq8012



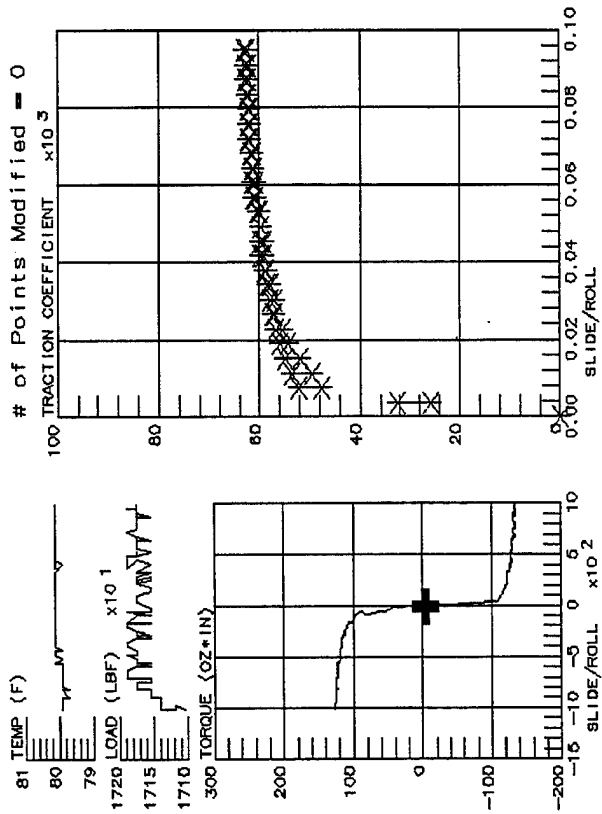
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #28
80F 21LBF 343RPM 13 FILE: bq8012



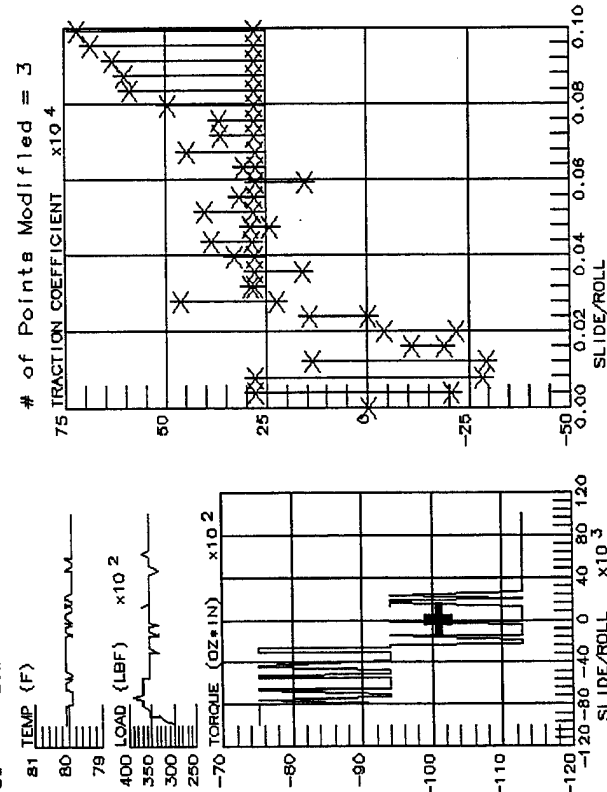
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #29
80F 72LBF 343RPM 14 FILE: bq8012



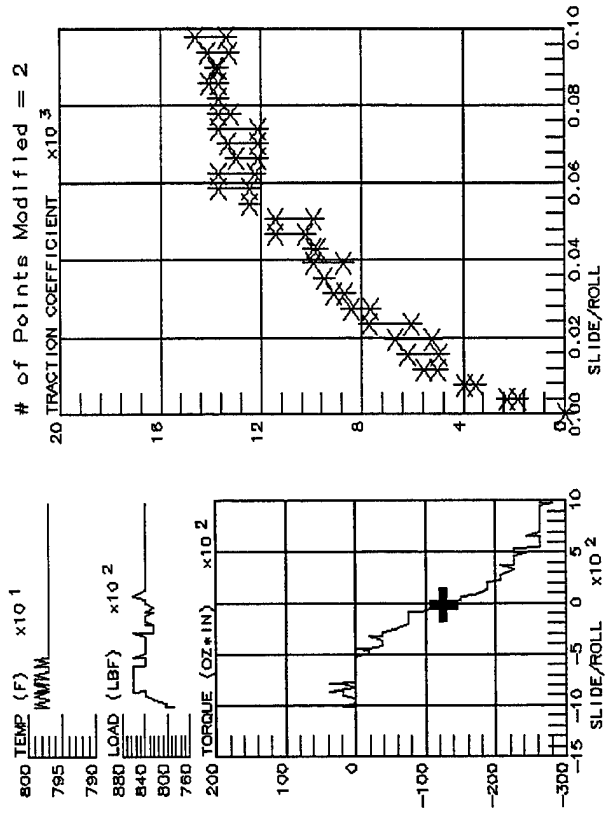
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #30
80F 172LBF 343RPM 15 FILE: bq8012



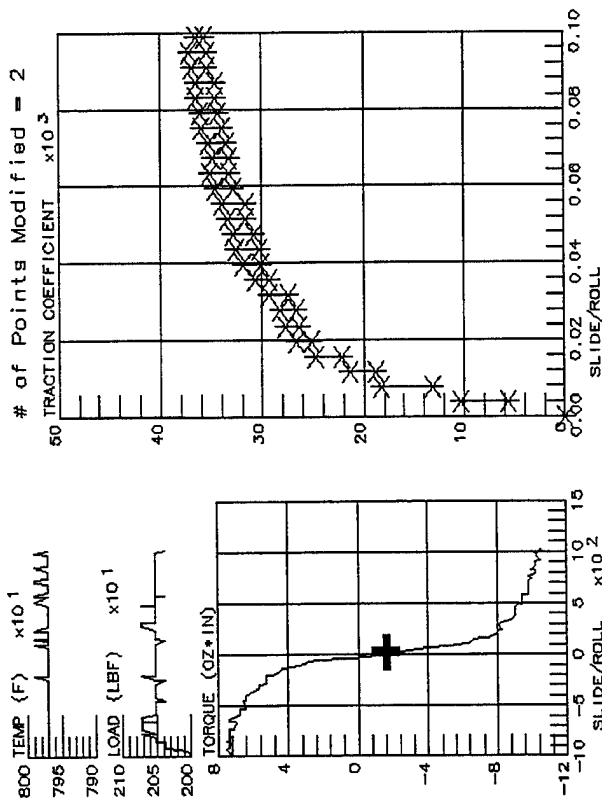
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #31
80F 3LBF 650RPM 16 FILE: bq8012



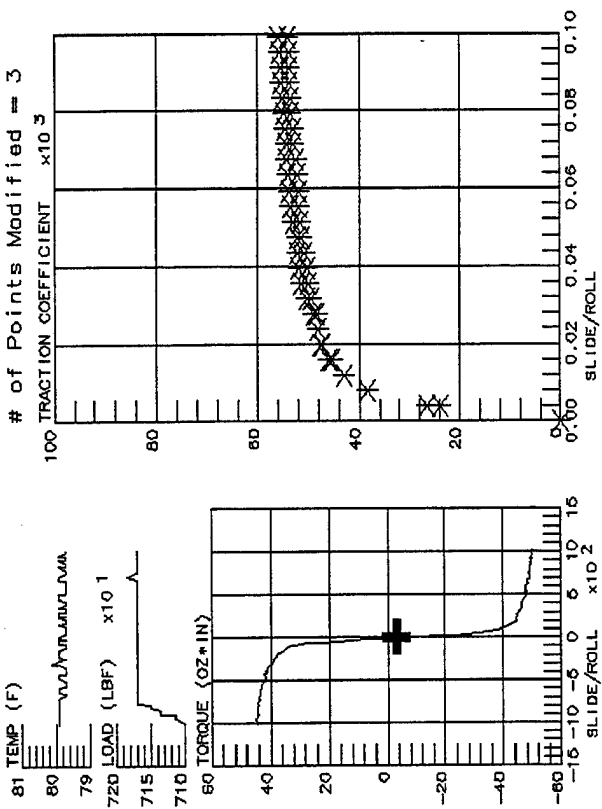
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #32
80F 8LBF 650RPM 17 FILE: bq8012



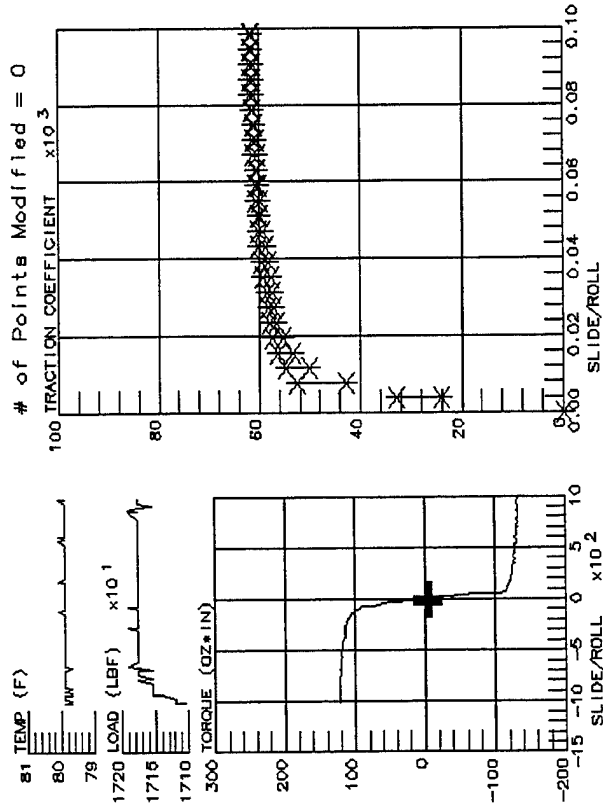
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #33
80F 21LBF 650RPM 18 FILE: bq8012



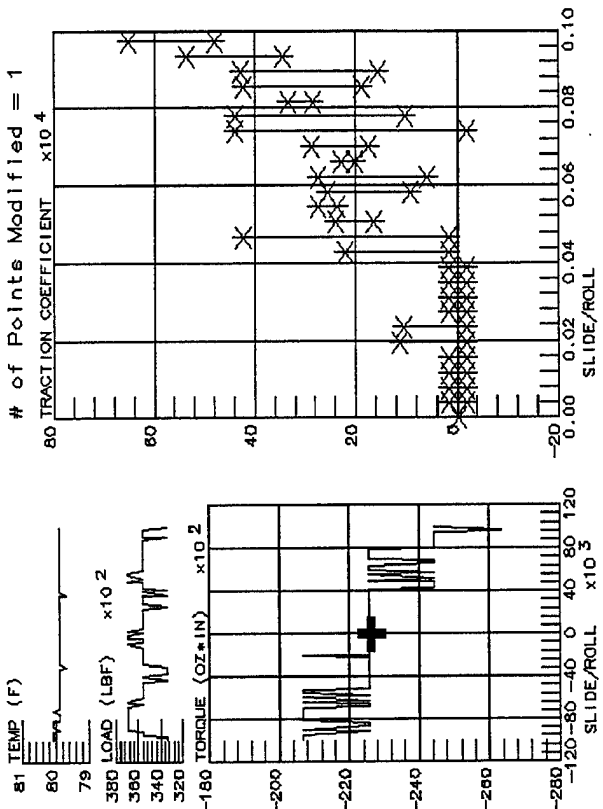
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #34
80F 72LBF 660RPM 19 FILE: bq8012



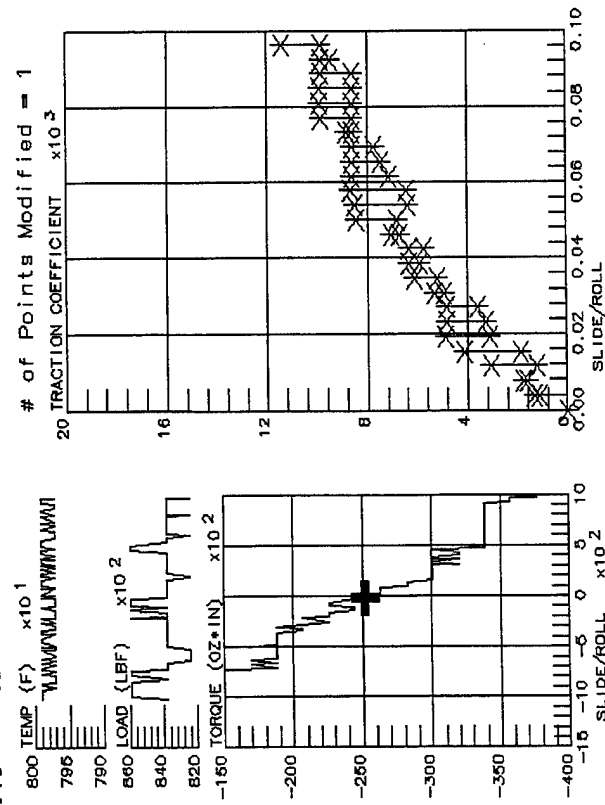
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #35
80F 172LBF 650RPM 20 FILE: bq8012



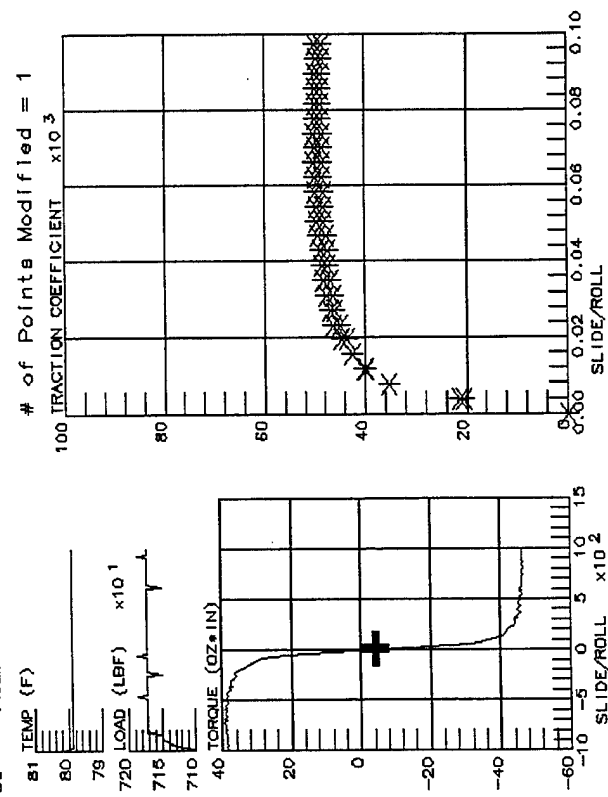
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #36
80F 3LBF 1260RPM 21 FILE: bq8012



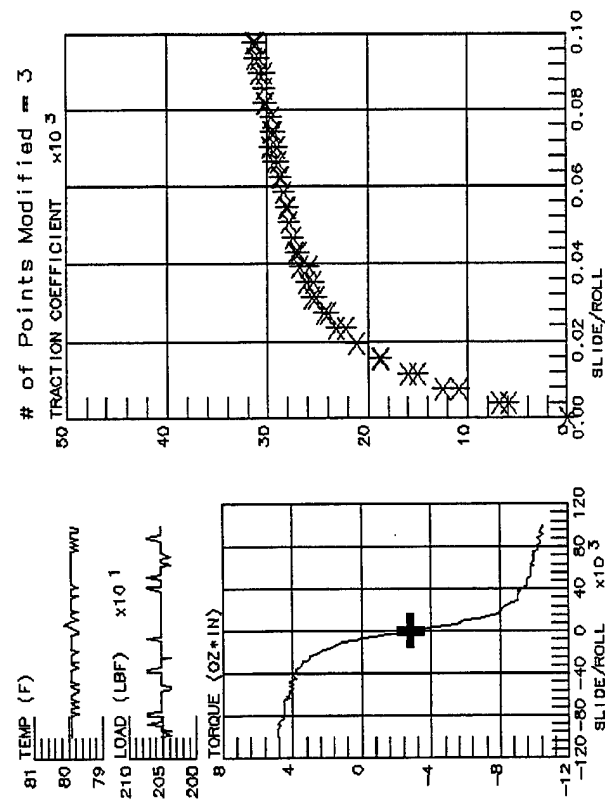
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #37
80F 8LBF 1260RPM 22 FILE: bq8012



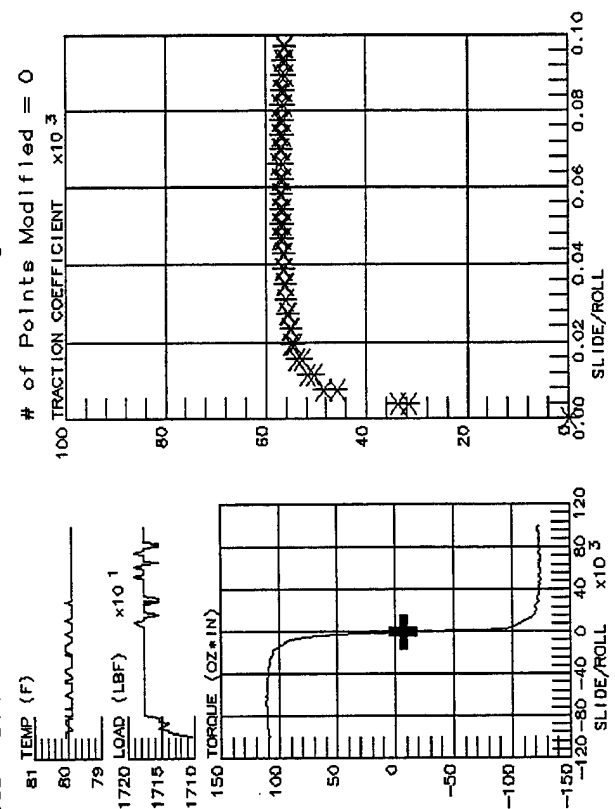
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #39
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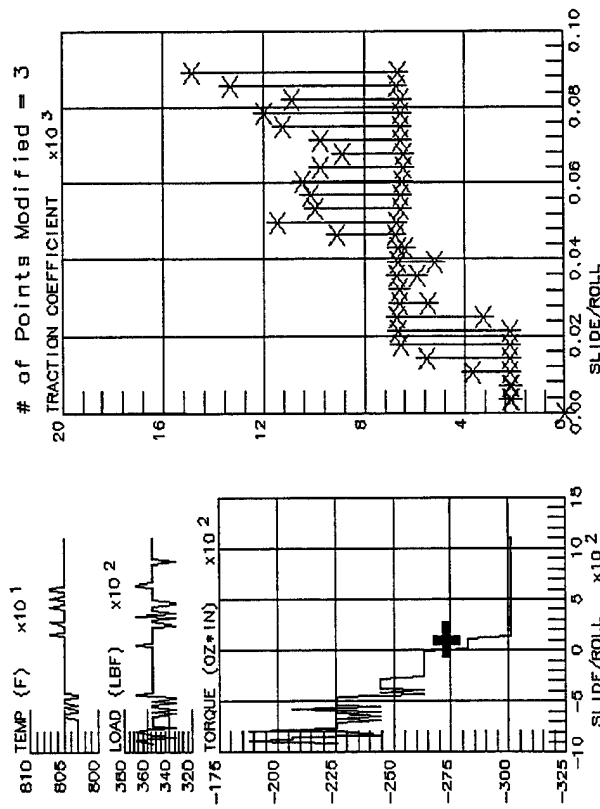
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #38
80F 21LBF 1260RPM 23 FILE: bq8012



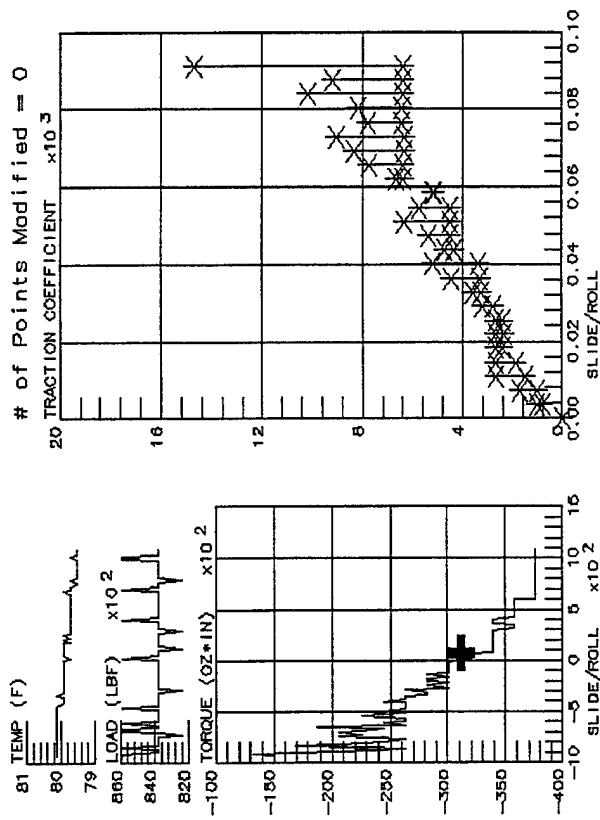
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #40
80F 172LBF 1260RPM 25 FILE: bq8012



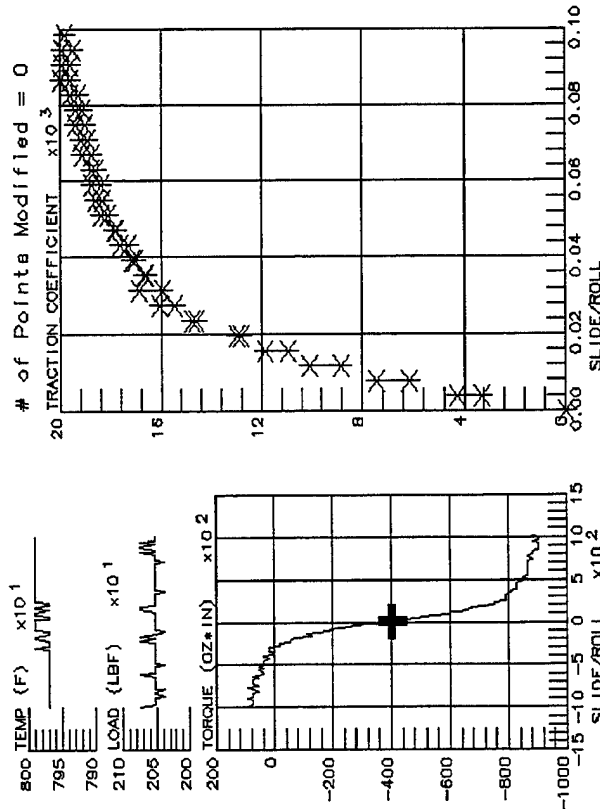
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #41
80F 3LBF 2559RPM 26 FILE: bq8012



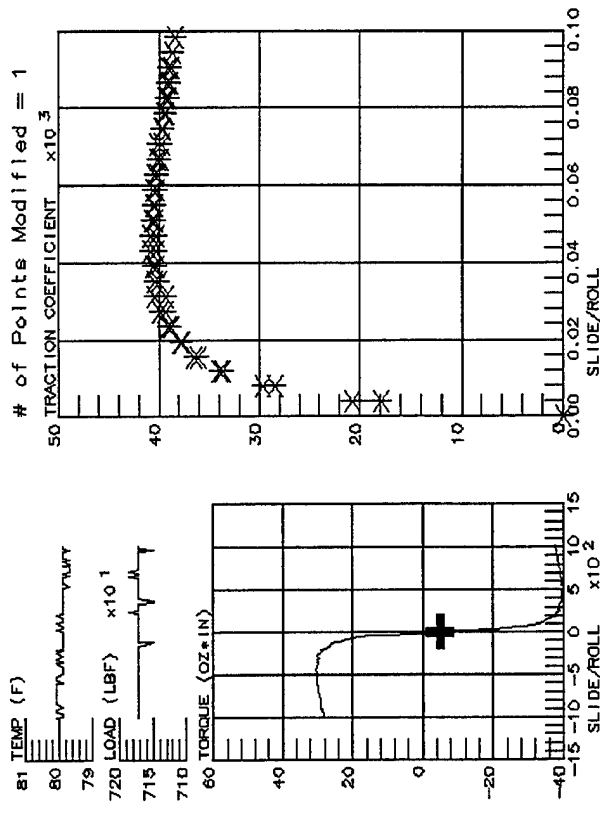
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #42
80F 8LBF 2559RPM 27 FILE: bq8012



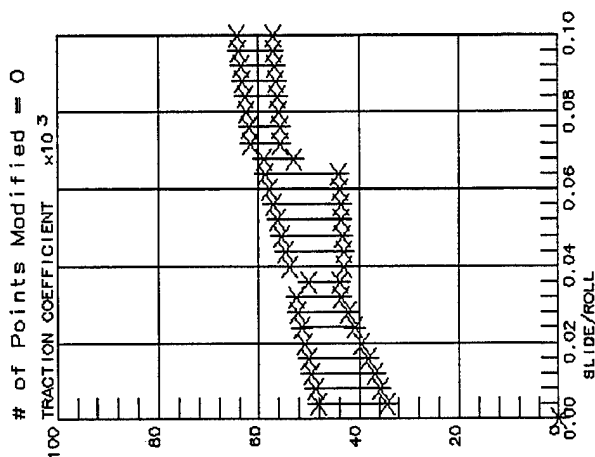
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #43
80F 21LBF 2559RPM 28 FILE: bq8012



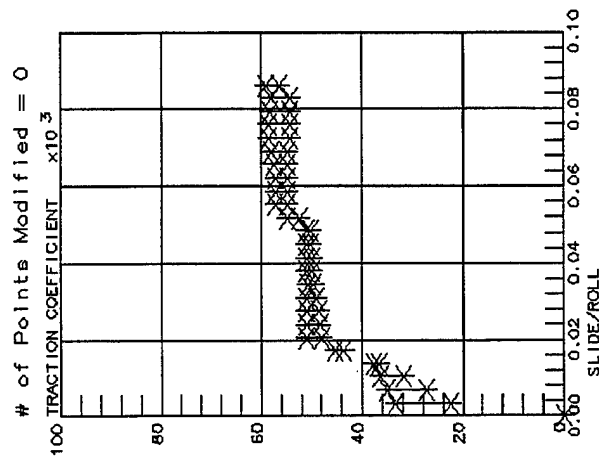
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #44
80F 72LBF 2559RPM 29 FILE: bq8012



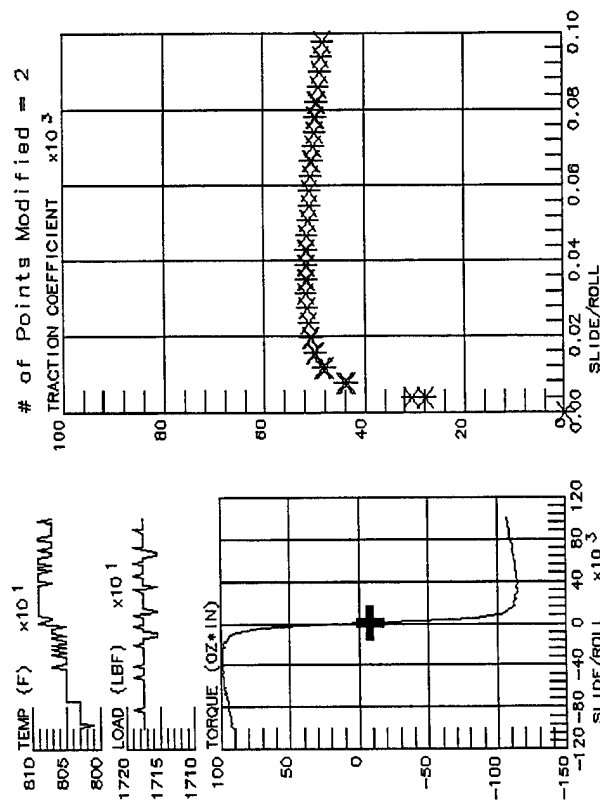
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #46
80F 72LBF 76RPM 1 FILE: bq8012x



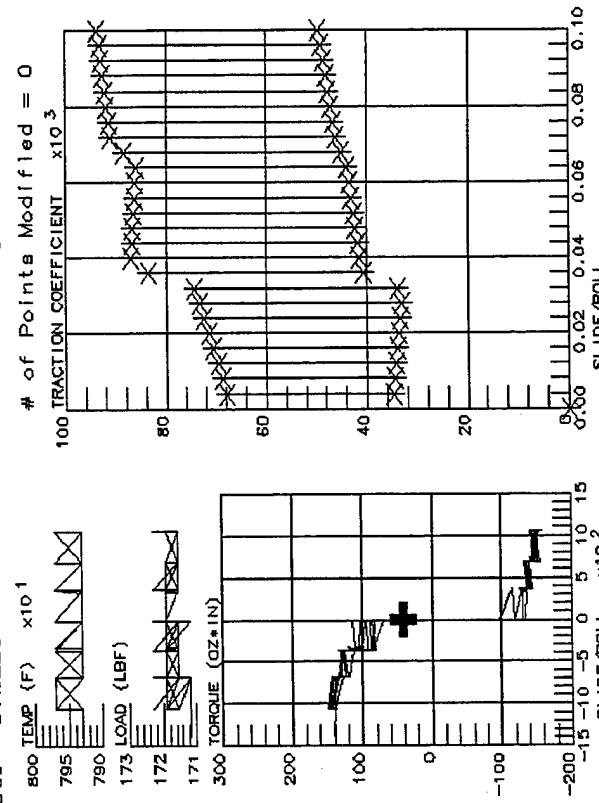
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #48
80F 72LBF 152RPM 3 FILE: bq8012x



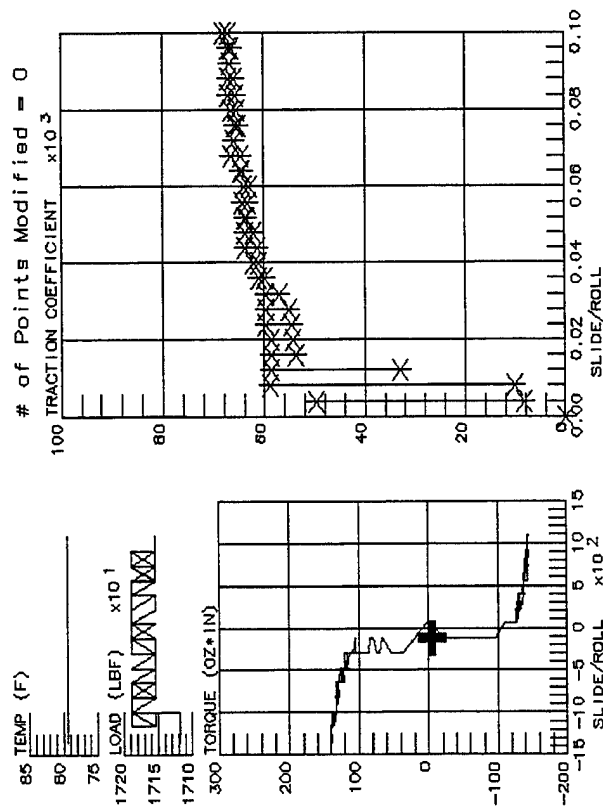
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #45
80F 172LBF 2558RPM 30 FILE: bq8012



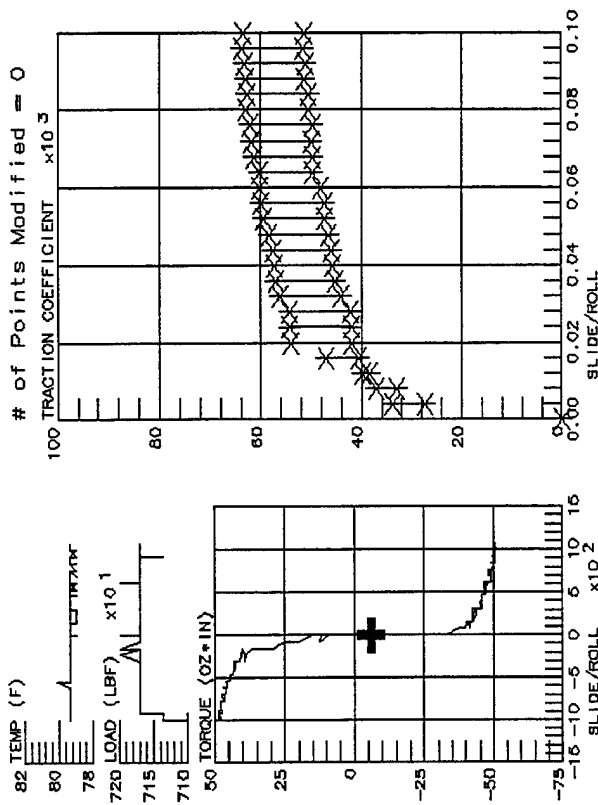
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #47
80F 172LBF 76RPM 2 FILE: bq8012x



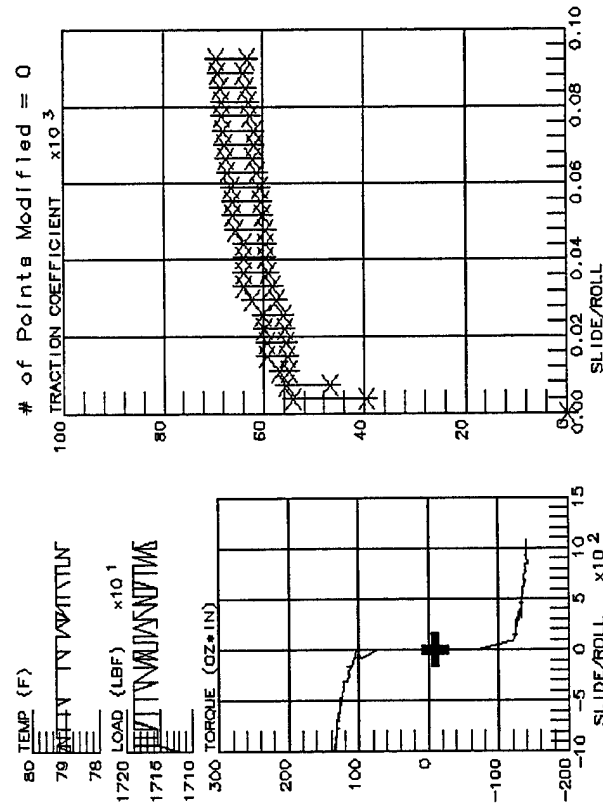
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #49
80F 172LBF 152RPM 4 FILE: bq8012x



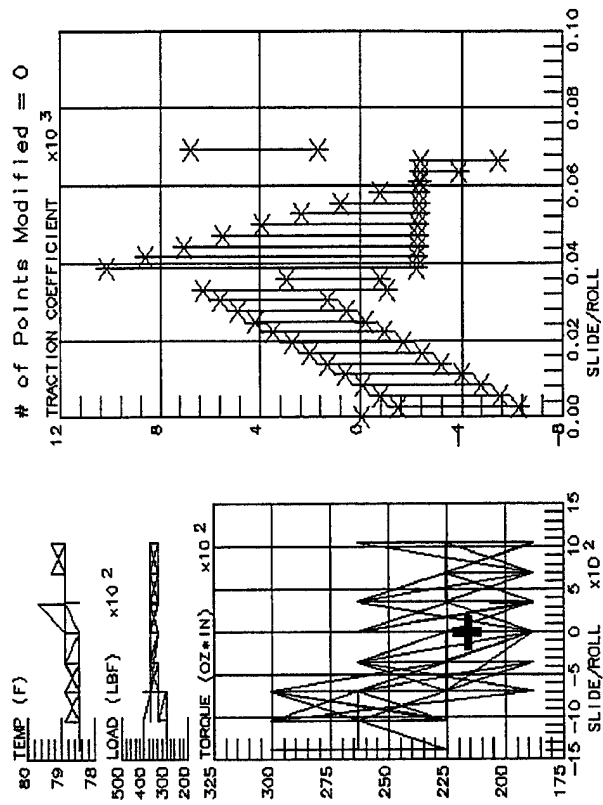
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #50
80F 72LBF 343RPM 5 FILE: bq8012x



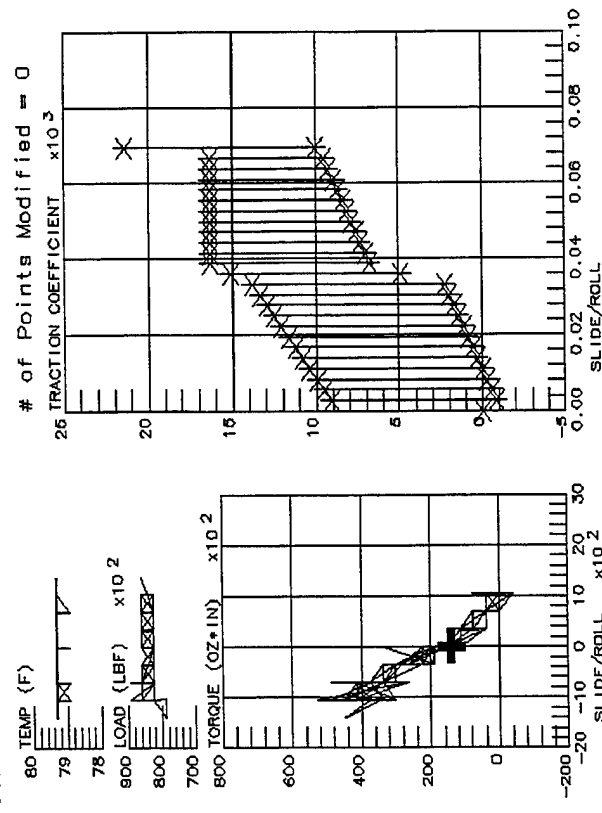
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #51
80F 172LBF 343RPM 6 FILE: bq8012x



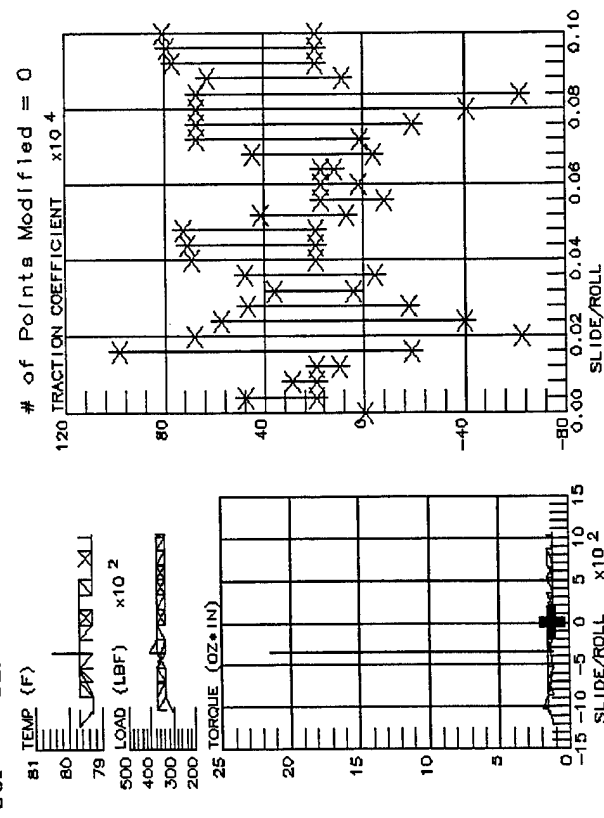
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #52
80F 3LBF 76RPM 1 FILE: bq801x



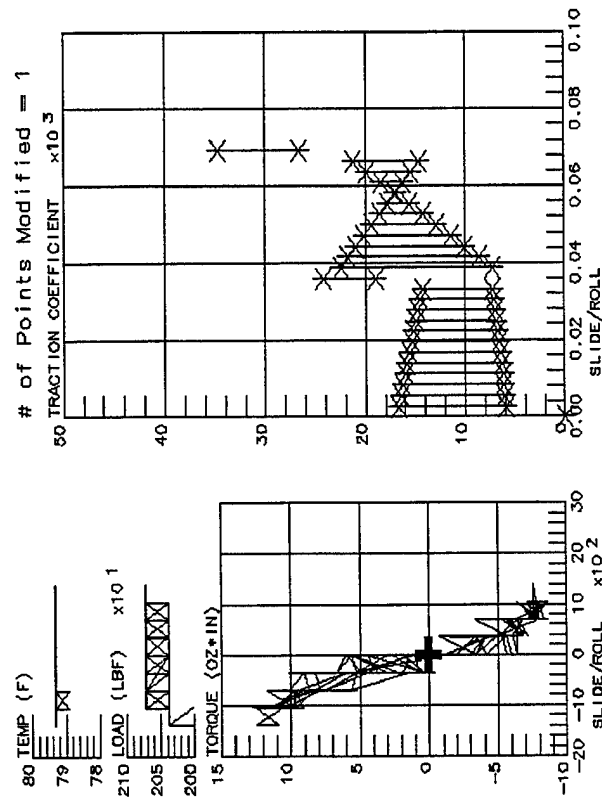
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #53
80F 8LBF 76RPM 2 FILE: bq801x



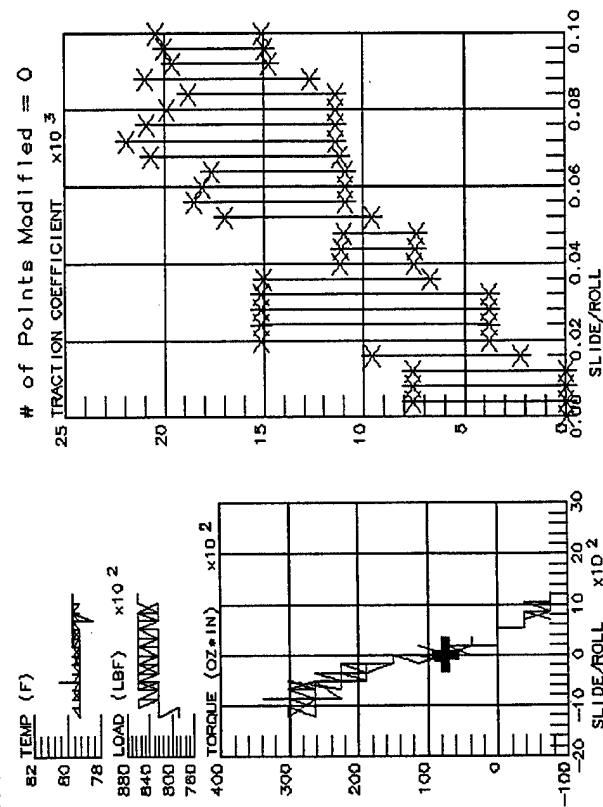
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #55
80F 3LBF 152RPM 4 FILE: bq801x



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #54
80F 21LBF 76RPM 3 FILE: bq801x

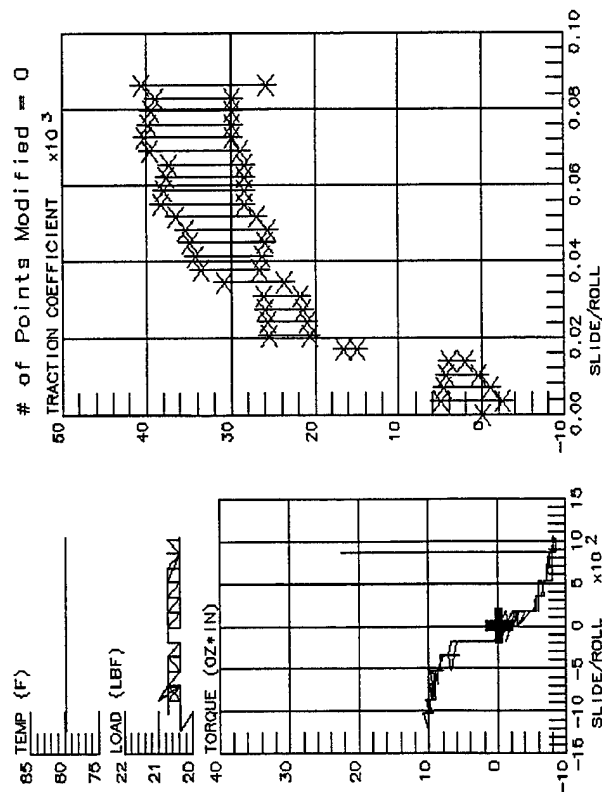


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #56
80F 8LBF 152RPM 5 FILE: bq801x

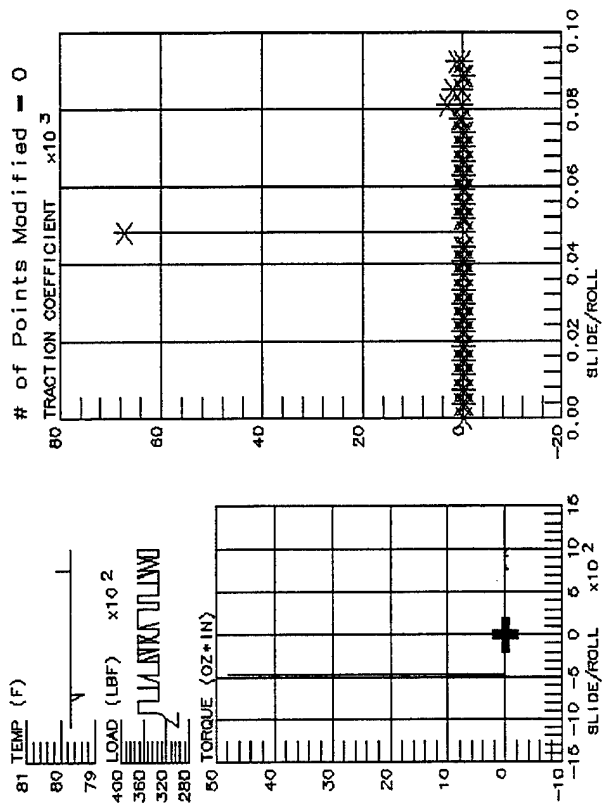


TRACTION MONITORING

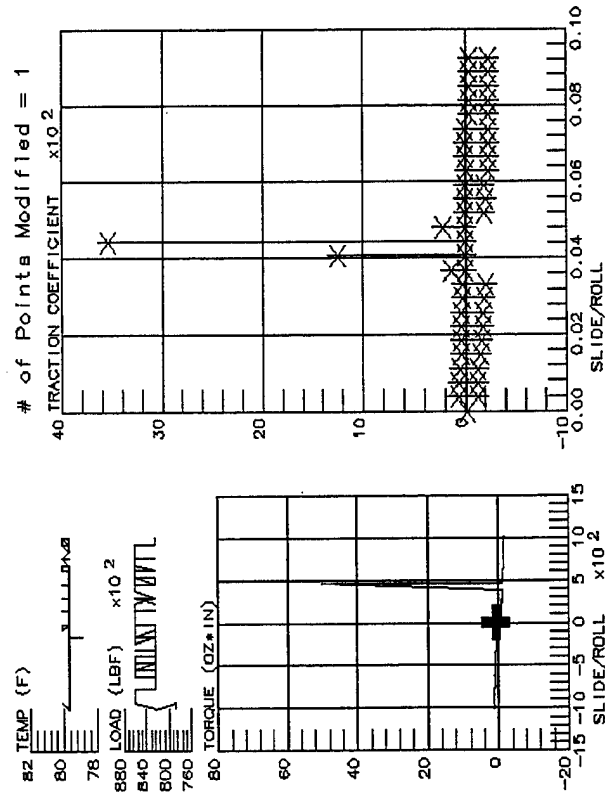
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #57
80F 21LBF 152RPM 6 FILE: bq801x



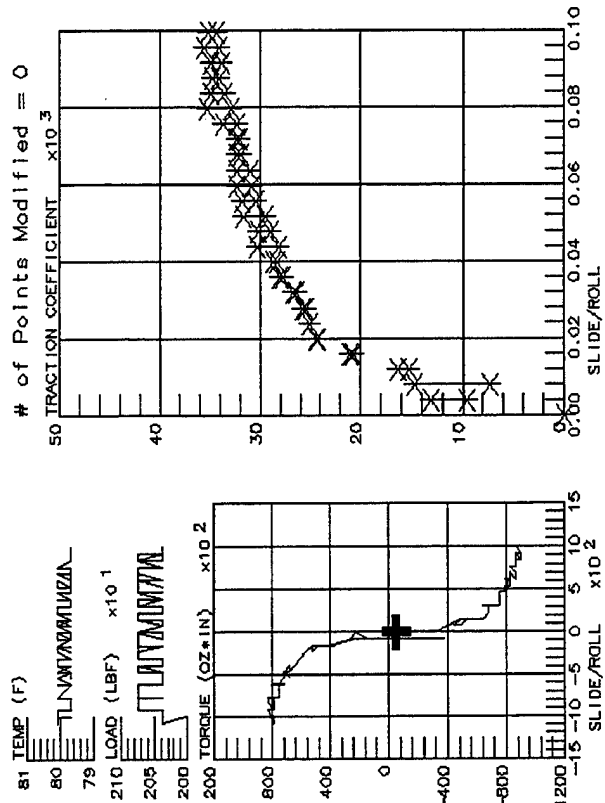
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #58
80F 3LBF 343RPM 7 FILE: bq801x



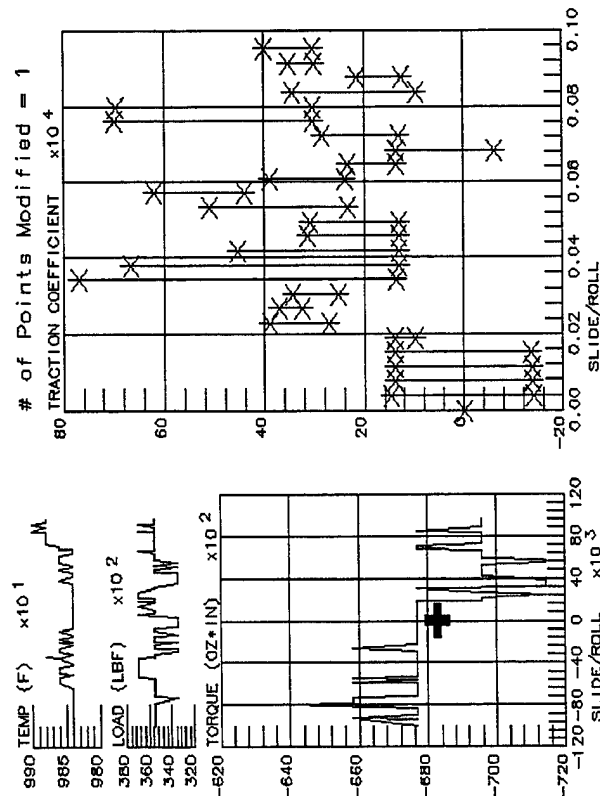
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #59
80F 8LBF 343RPM 8 FILE: bq801x



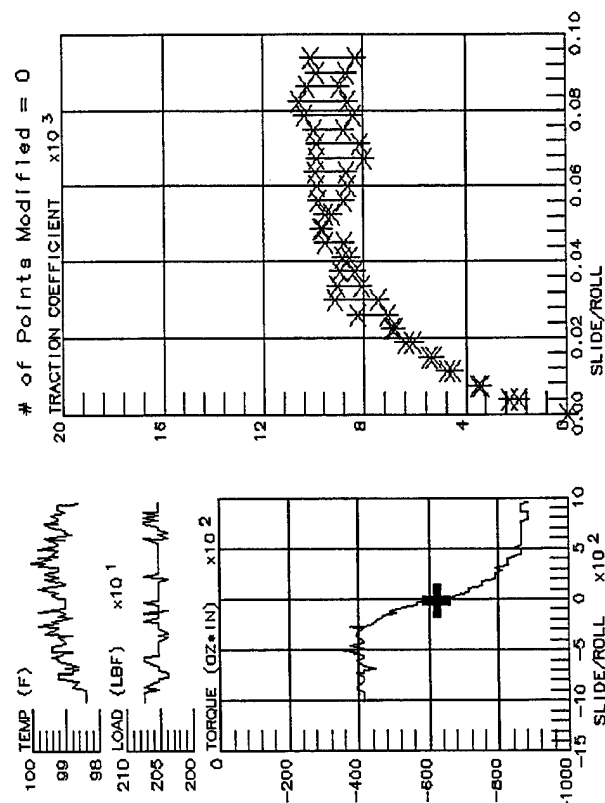
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #60
80F 21LBF 343RPM 9 FILE: bq801x



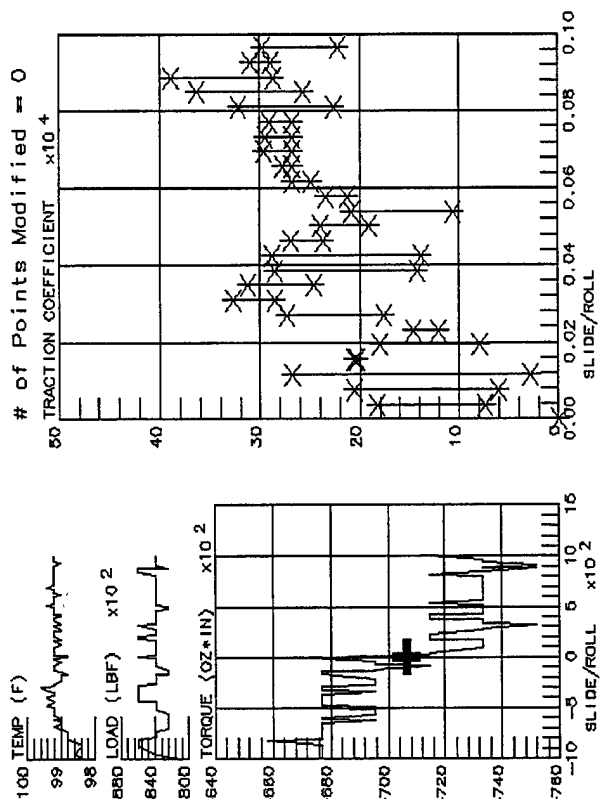
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #61
100F 3LBF 5080RPM 1 FILE: bq100h2



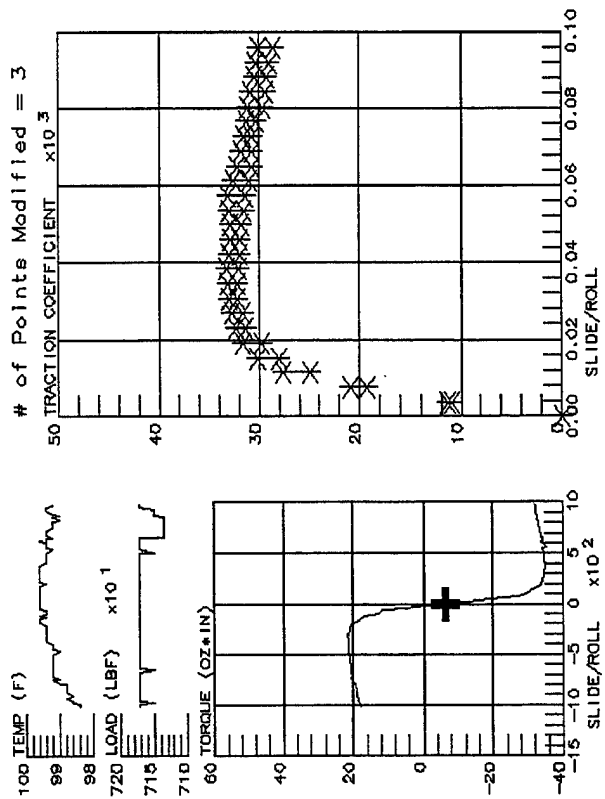
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #63
100F 21LBF 5080RPM 3 FILE: bq100h2



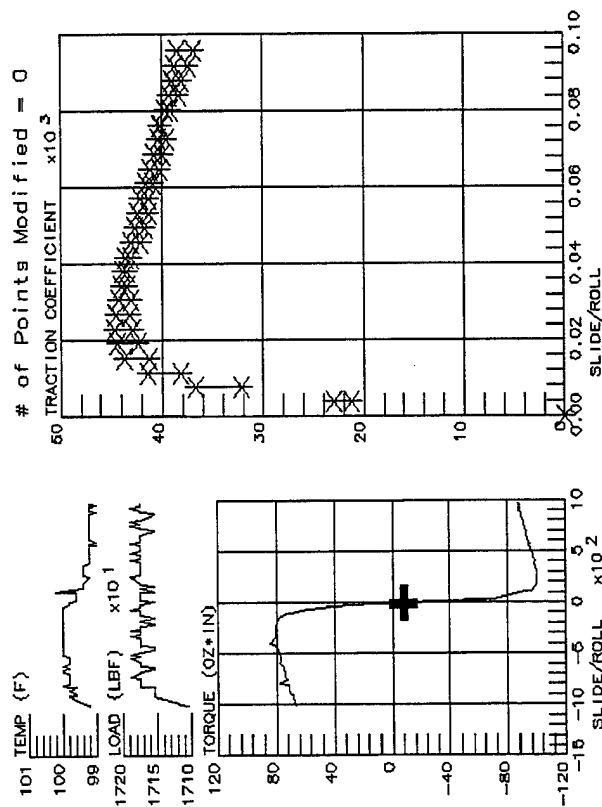
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #62
100F 8LBF 5080RPM 2 FILE: bq100h2



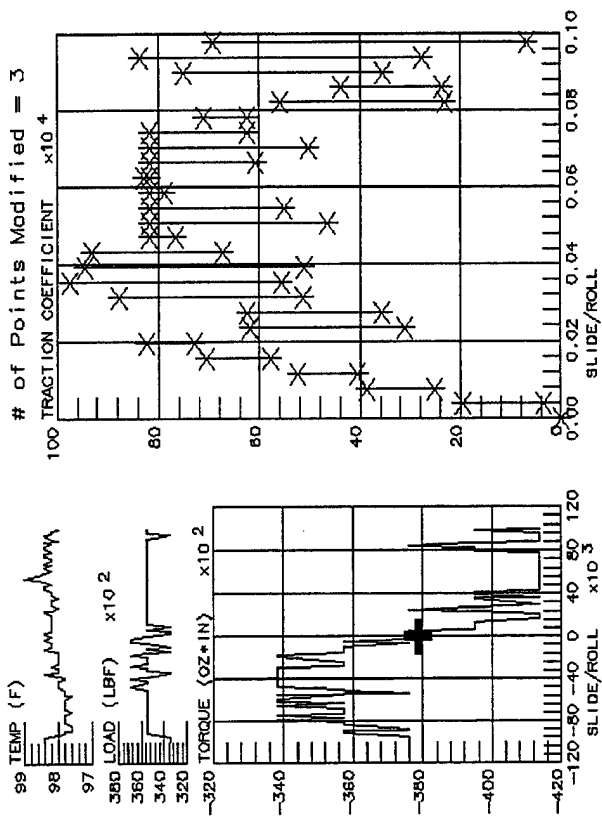
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #64
100F 72LBF 5080RPM 4 FILE: bq100h2



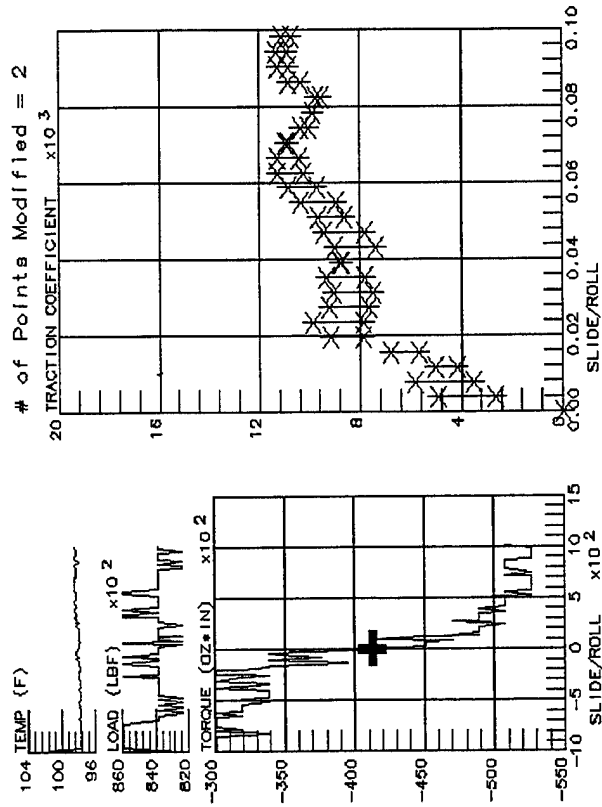
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #65
100F 172LBF 6090RPM 5 FILE: bq100h2



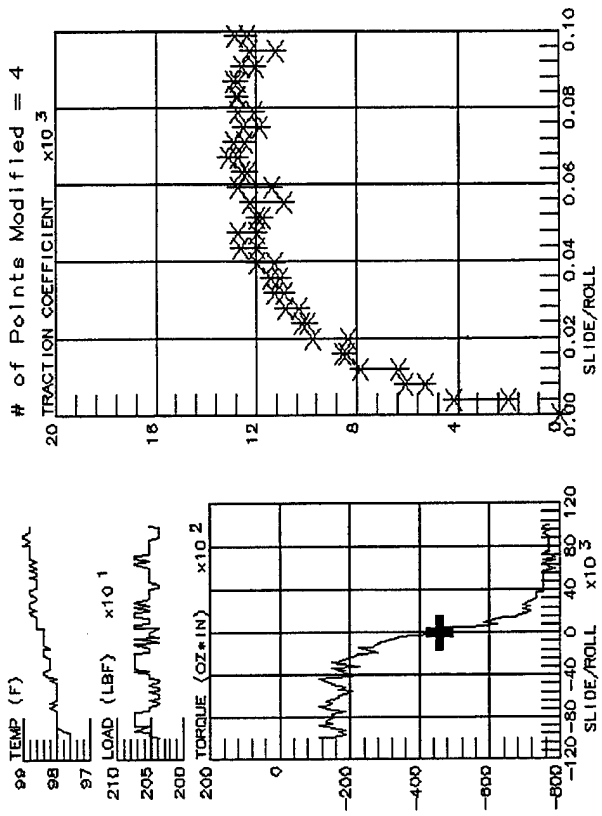
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #66
100F 3LBF 7639RPM 6 FILE: bq100h2



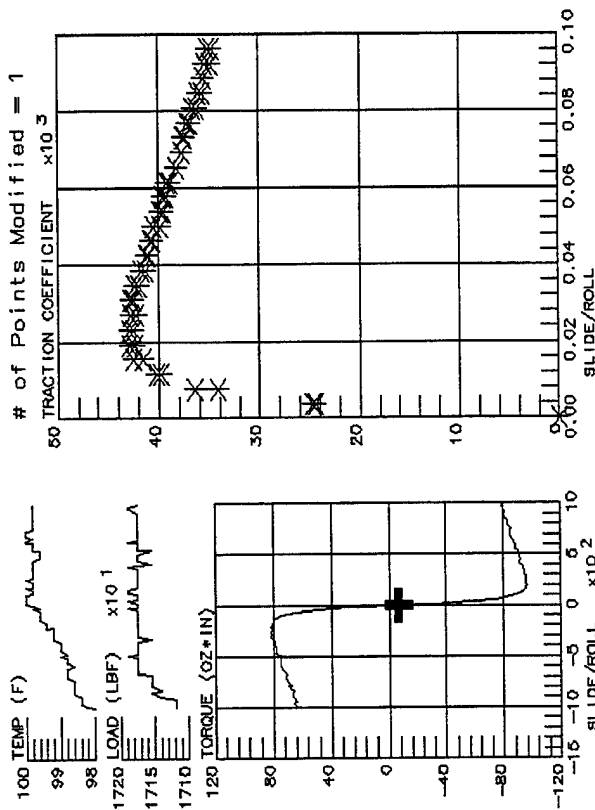
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #67
100F 8LBF 7639RPM 7 FILE: bq100h2



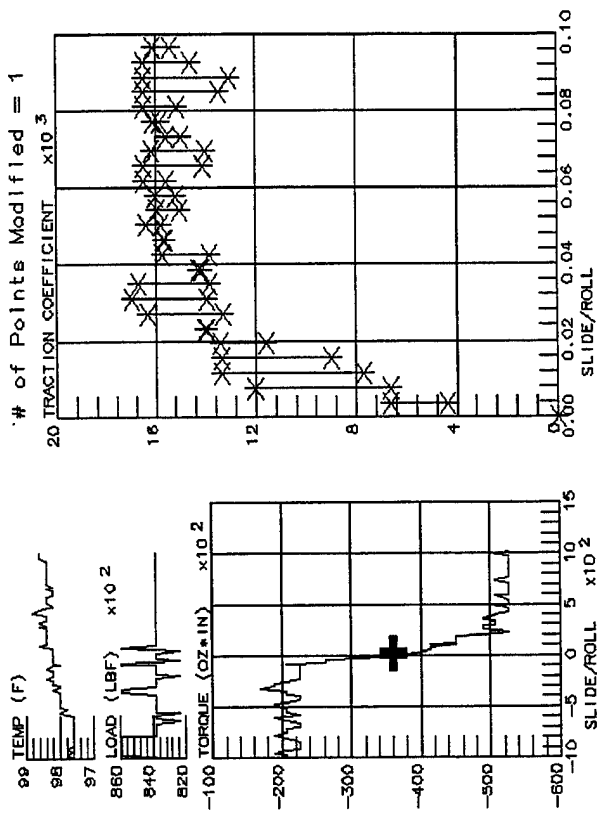
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #68
100F 21LBF 7639RPM 8 FILE: bq100h2



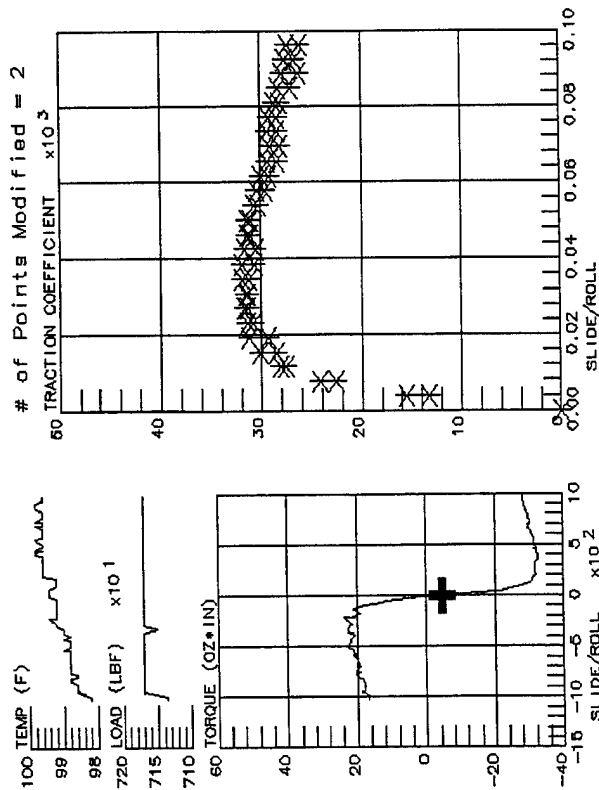
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #70
100F 172LBF 7639RPM 10 FILE: bq100h2



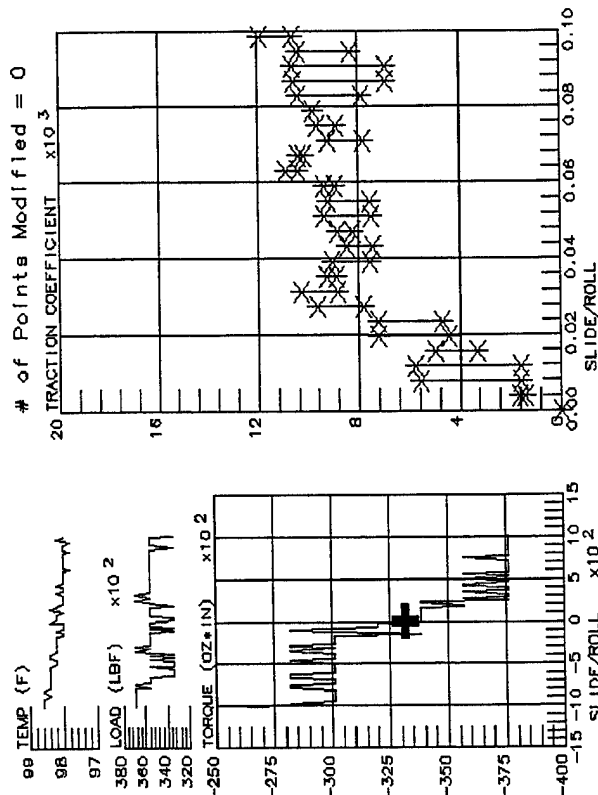
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #72
100F 8LBF 1019RPM 12 FILE: bq100h2



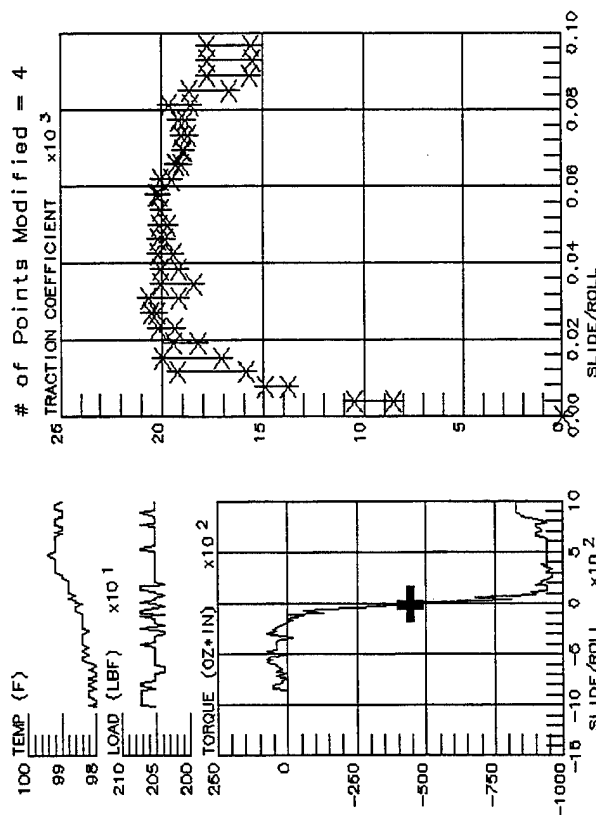
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #69
100F 72LBF 7639RPM 9 FILE: bq100h2



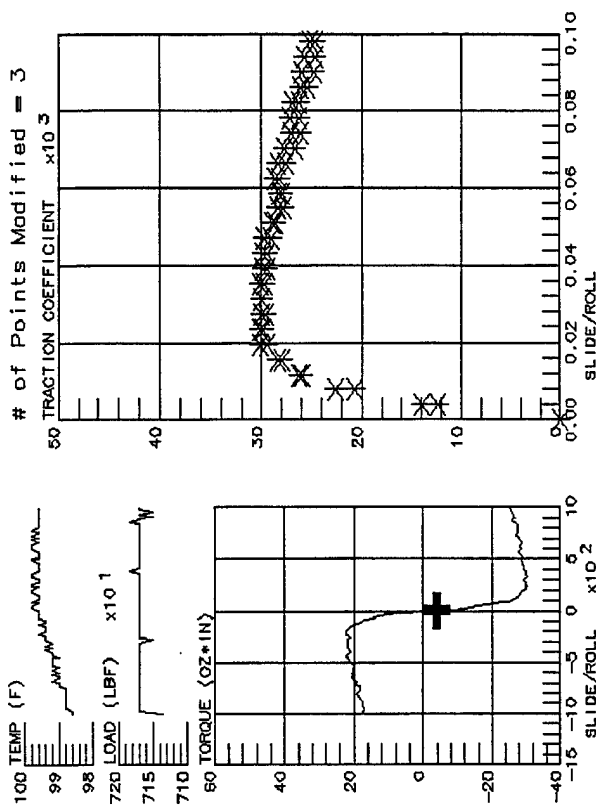
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #71
100F 3LBF 1019RPM 11 FILE: bq100h2



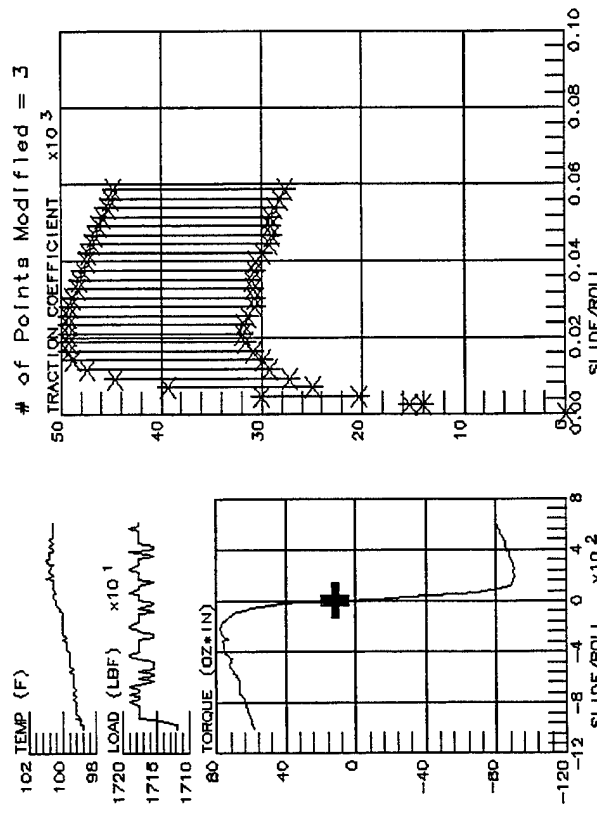
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #73
100F 21LBF 10198RPM 13 FILE: bq100h2



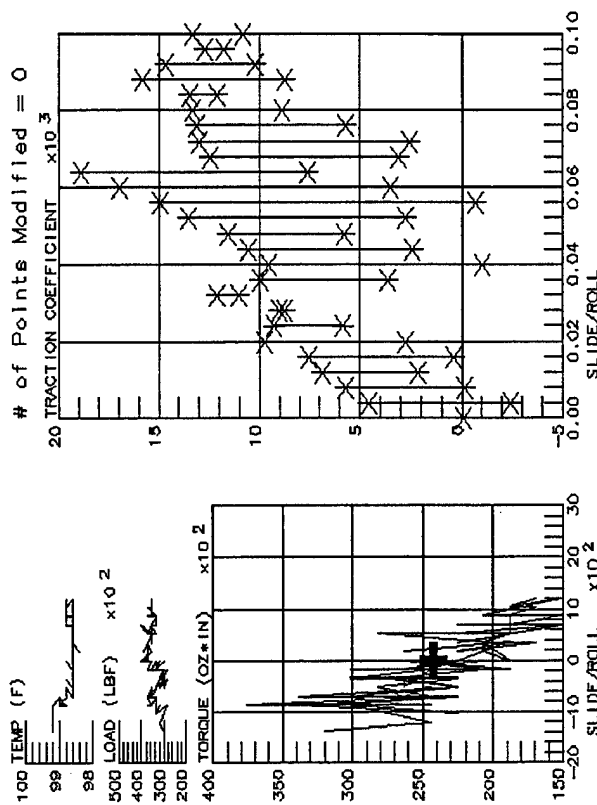
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #74
100F 72LBF 10198RPM 14 FILE: bq100h2



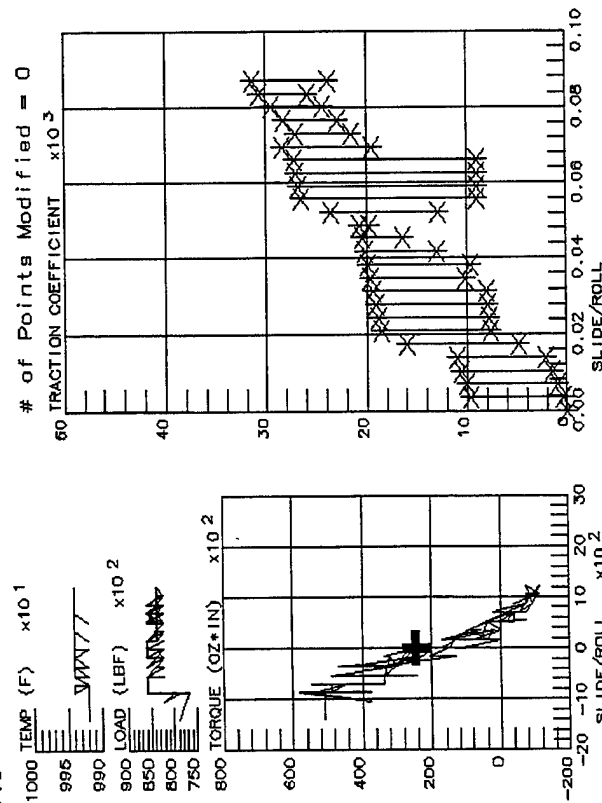
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #75
100F 172LBF 10198RPM 15 FILE: bq100h2



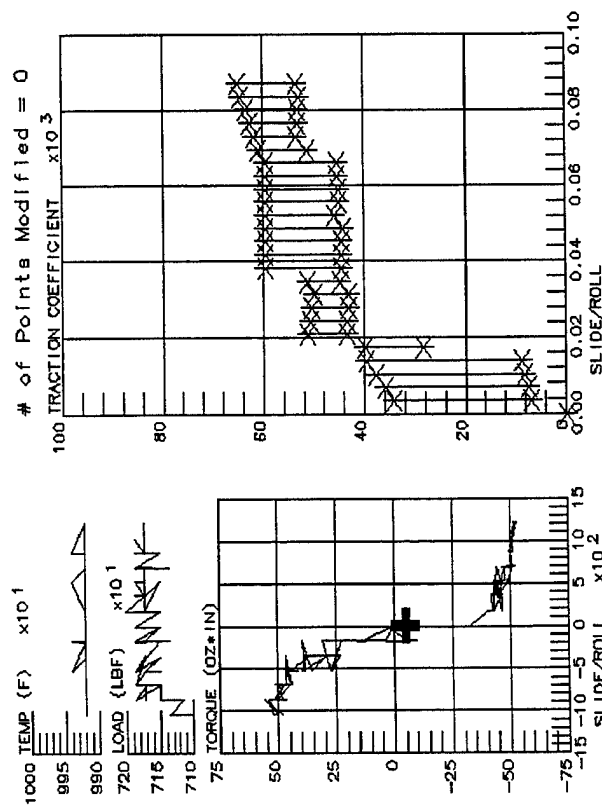
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #76
100F 3LBF 76RPM 1 FILE: bq10012



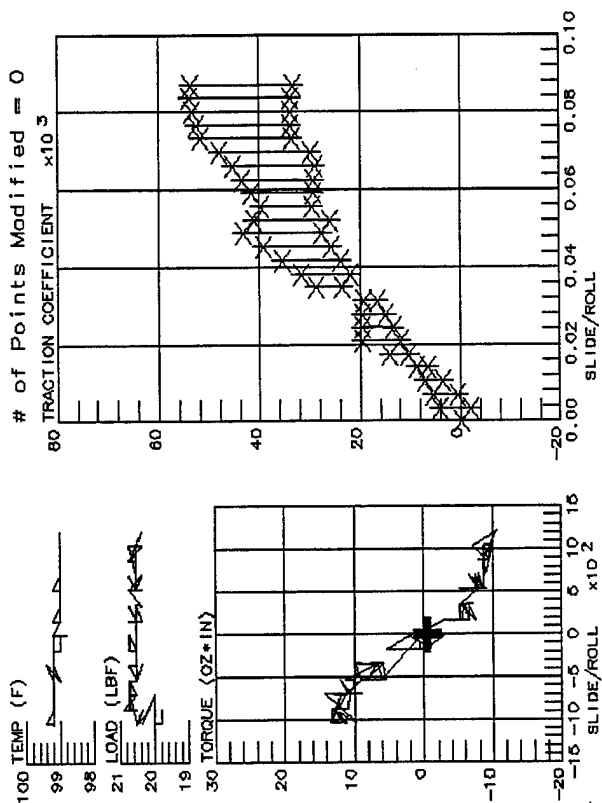
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #77
100F 8LBF 76RPM 2 FILE: bq10012



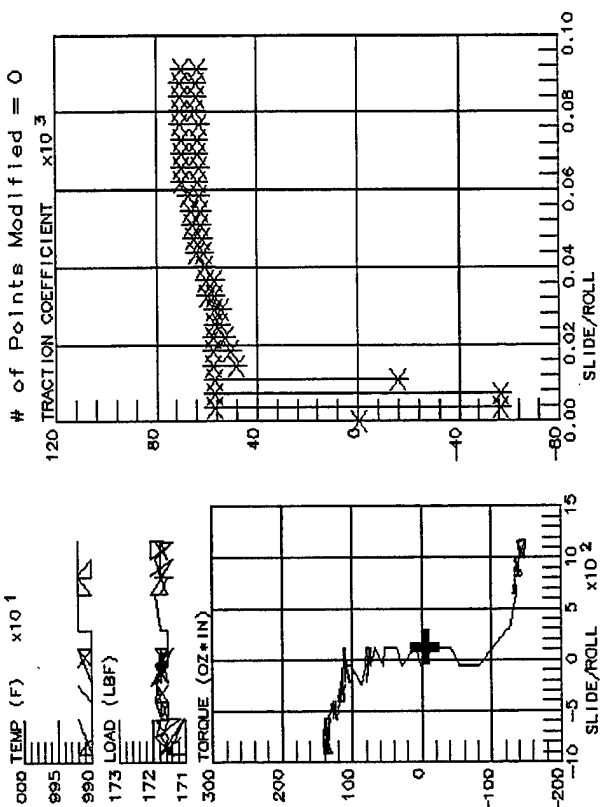
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #79
100F 72LBF 76RPM 4 FILE: bq10012



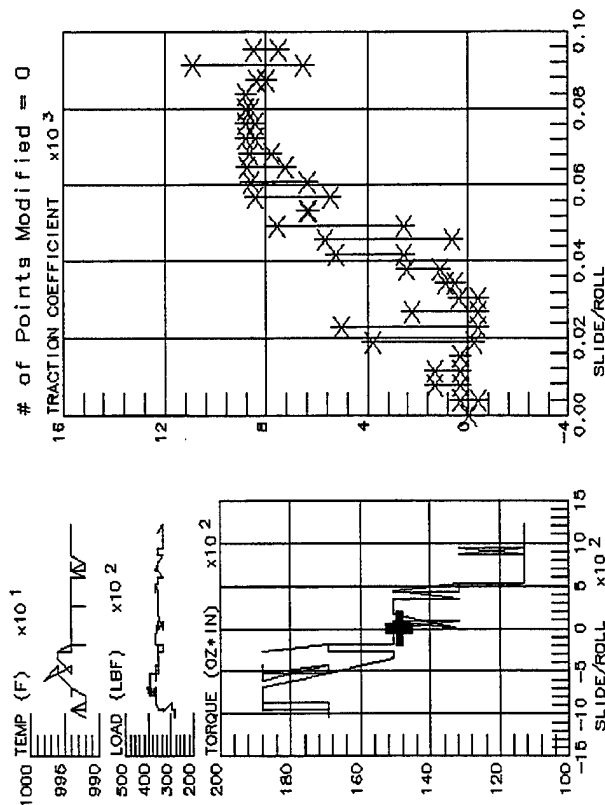
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #78
100F 21LBF 76RPM 3 FILE: bq10012



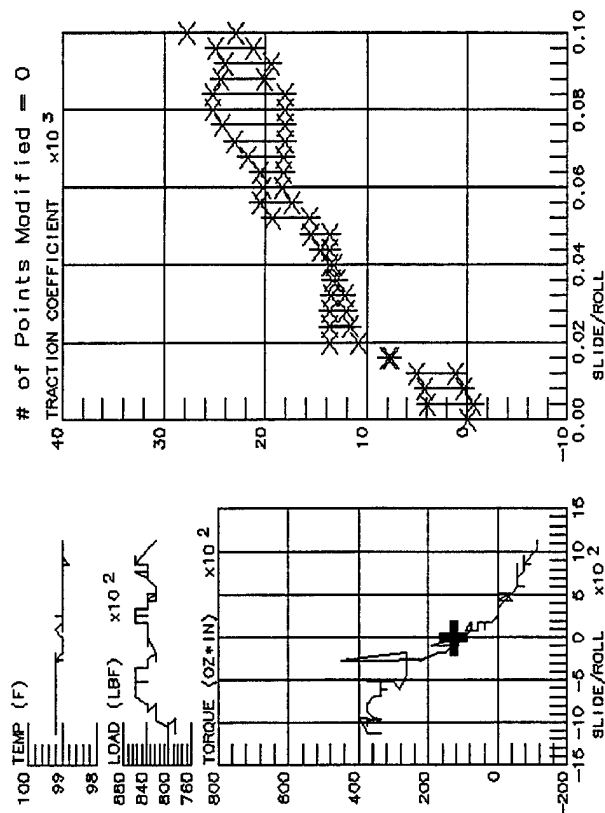
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #80
100F 172LBF 76RPM 5 FILE: bq10012



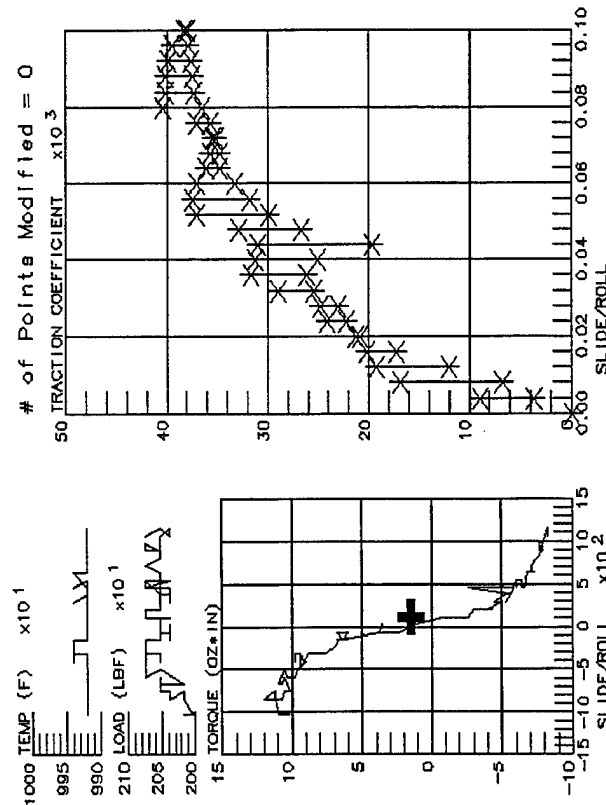
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #81
100F 3LBF 152RPM 6 FILE: bq10012



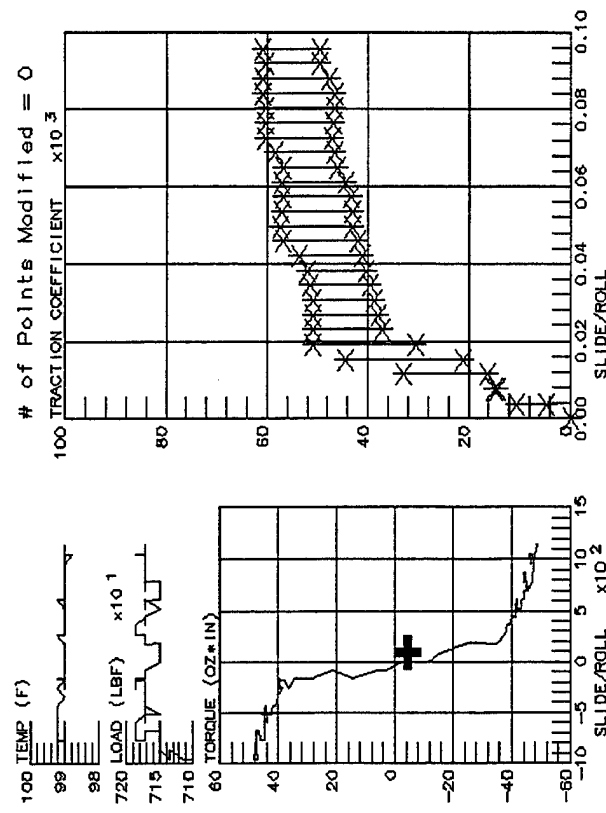
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #82
100F 8LBF 152RPM 7 FILE: bq10012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #83
100F 21LBF 152RPM 8 FILE: bq10012

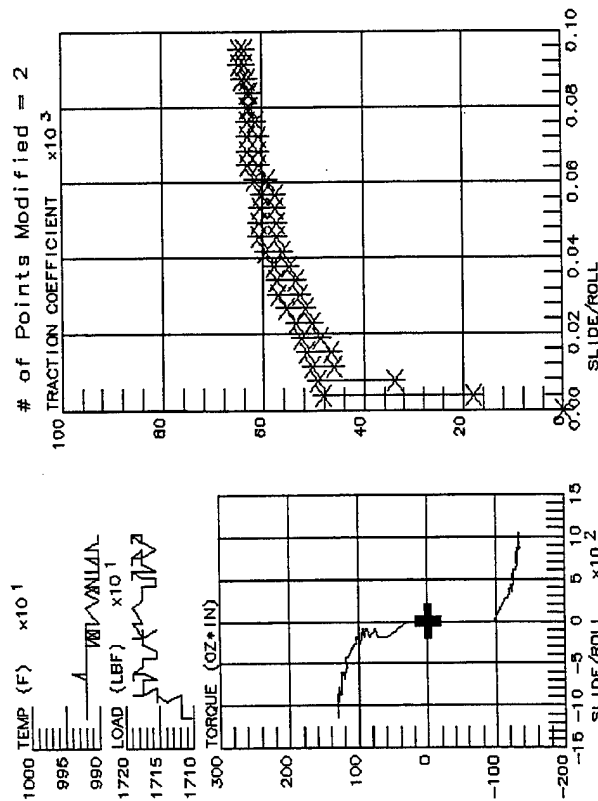


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #84
100F 72LBF 152RPM 9 FILE: bq10012

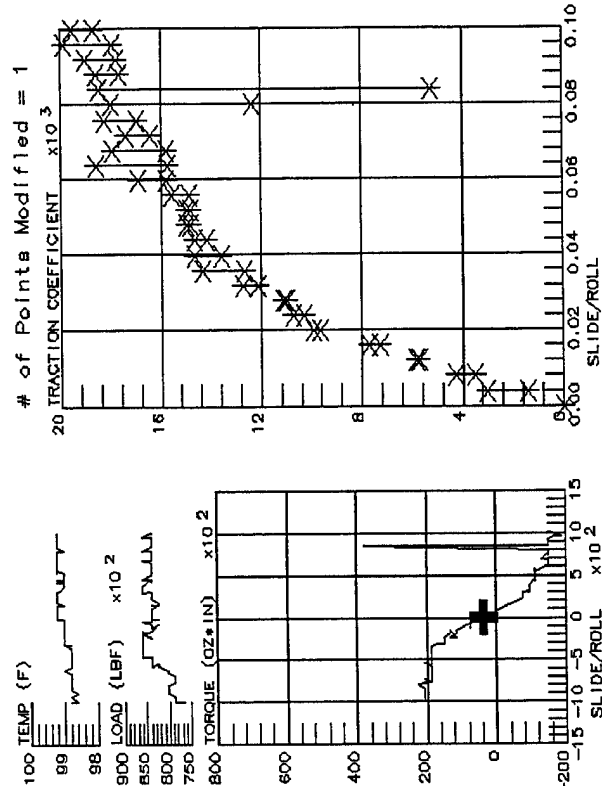


TRACTION MODELING

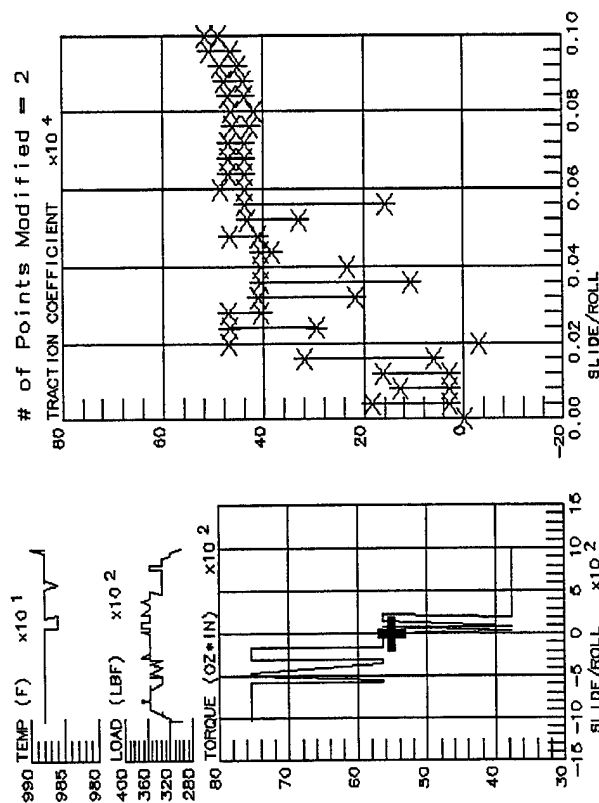
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #85
100F 172LBF 162RPM 10 FILE: bq10012



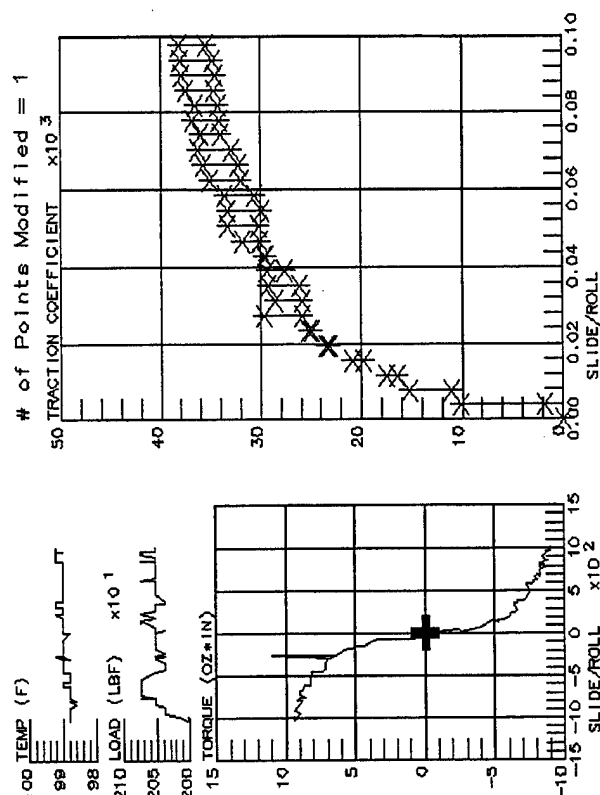
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #87
100F 81LBF 343RPM 12 FILE: bq10012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #86
100F 3LBF 343RPM 11 FILE: bq10012

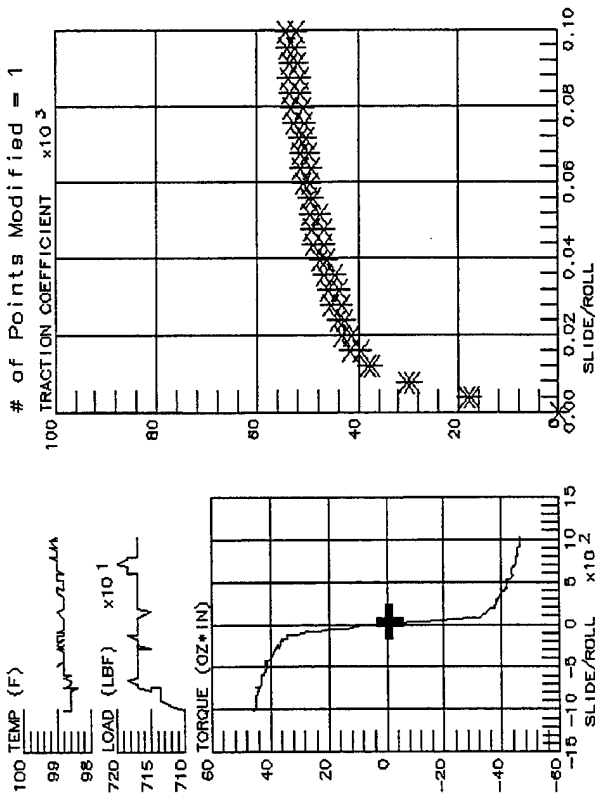


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #88
100F 21LBF 343RPM 13 FILE: bq10012

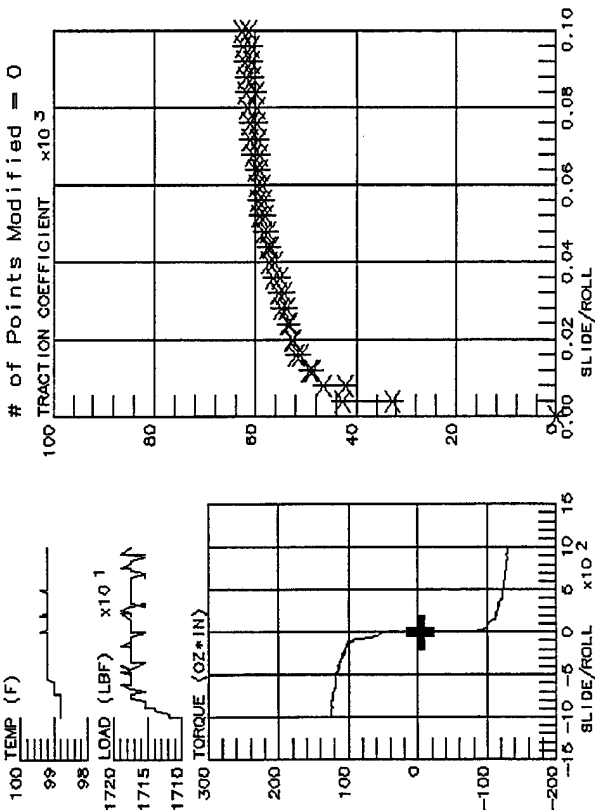


TRACTION MONITORING

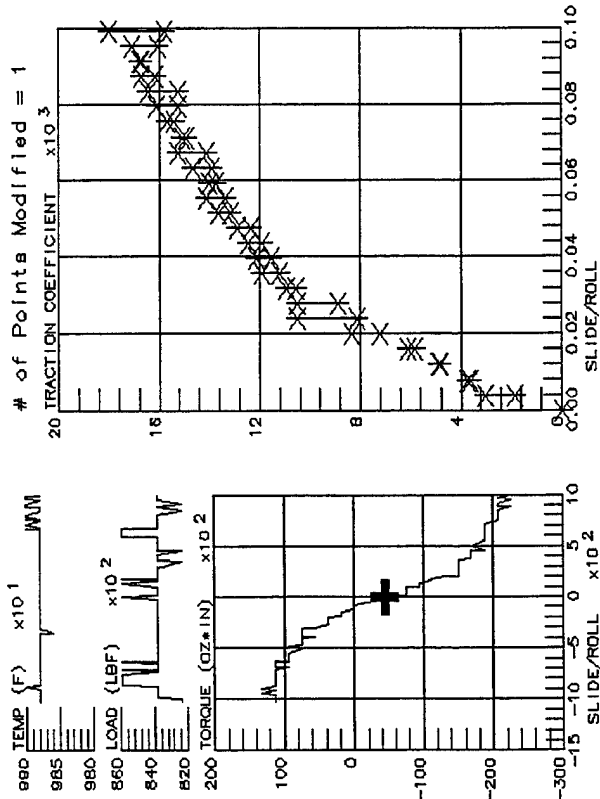
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #89
100F 72LBF 343RPM 14 FILE: bq10012



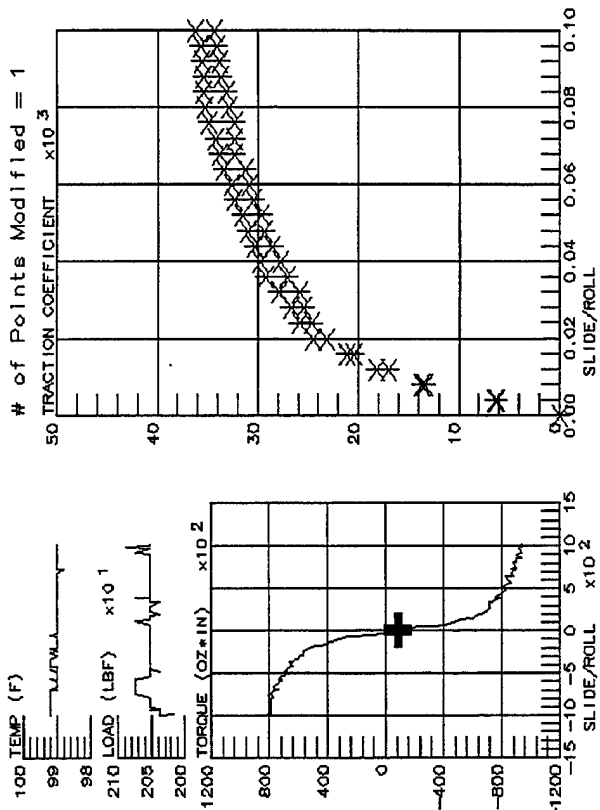
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #90
100F 172LBF 343RPM 15 FILE: bq10012



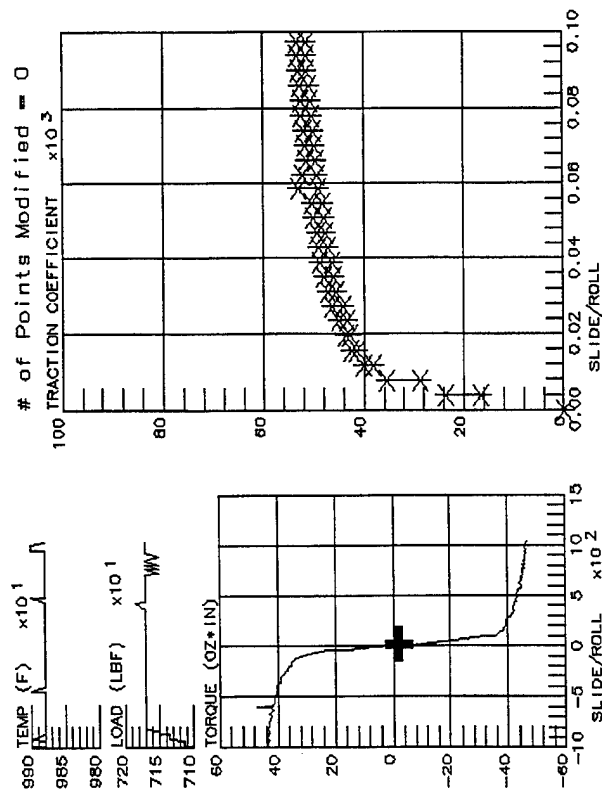
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #91
100F 81LBF 650RPM 17 FILE: bq10012



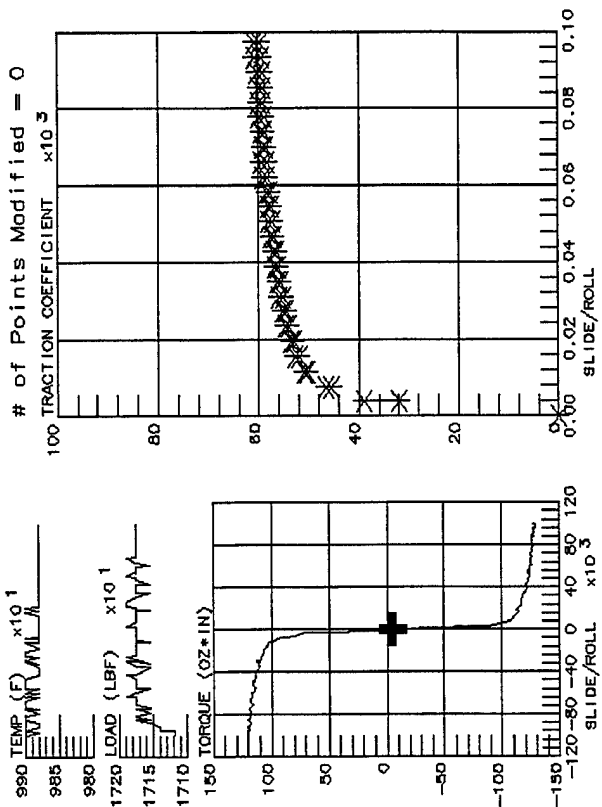
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #92
100F 21LBF 650RPM 18 FILE: bq10012



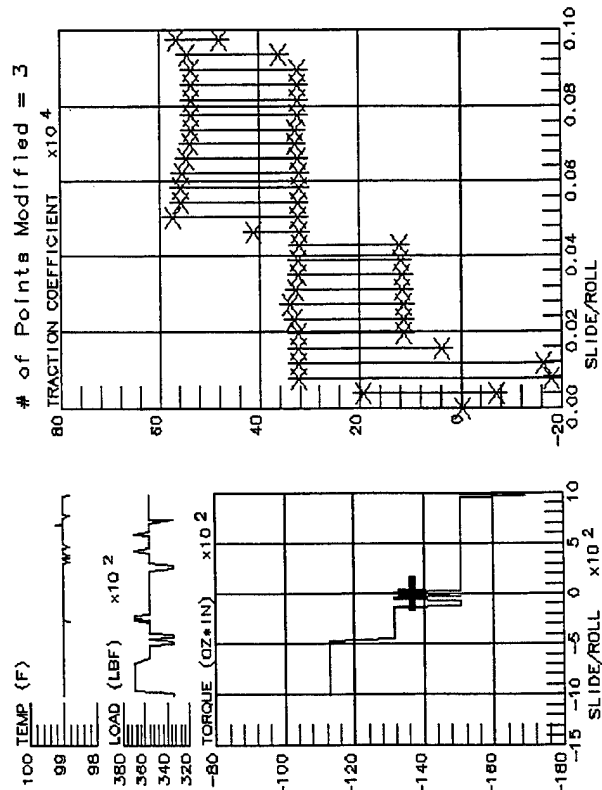
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #93
100F 72LBF 650RPM 19 FILE: bq10012



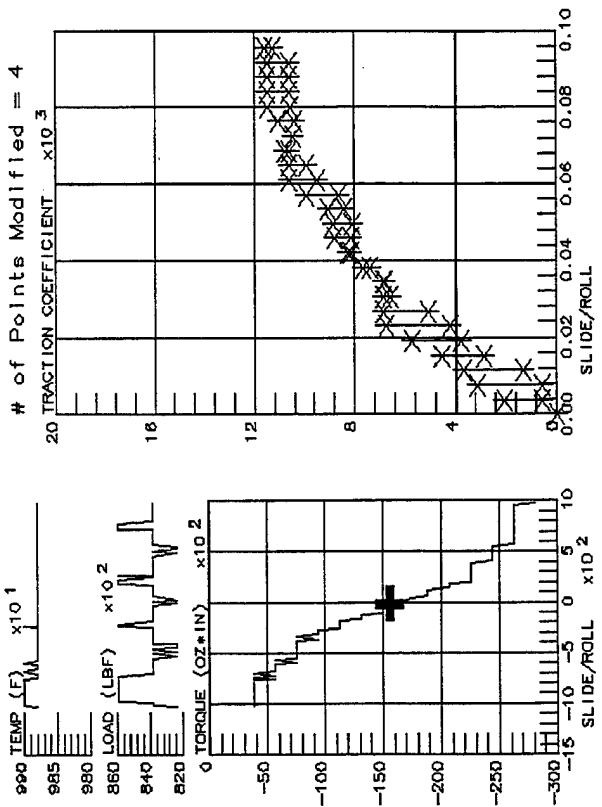
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #94
100F 172LBF 650RPM 20 FILE: bq10012



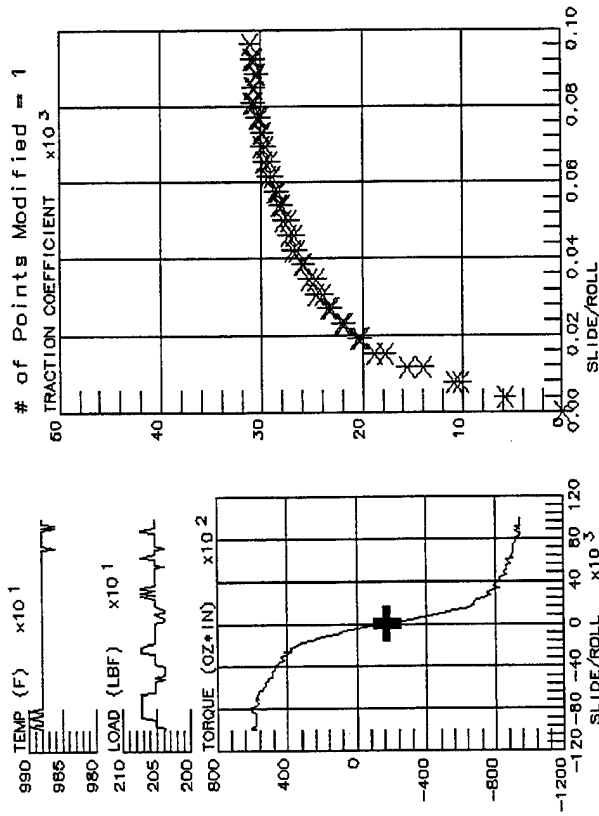
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #95
100F 31LBF 1260RPM 21 FILE: bq10012



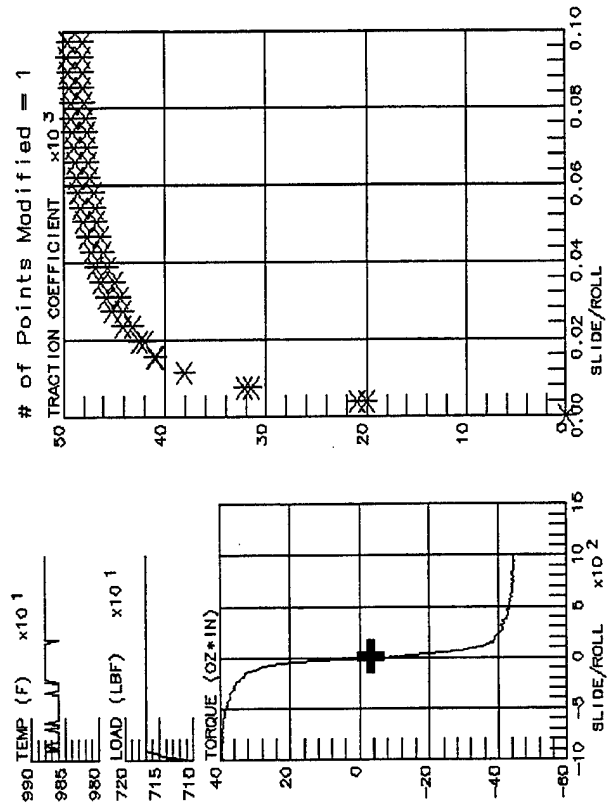
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #96
100F 8LBF 1260RPM 22 FILE: bq10012



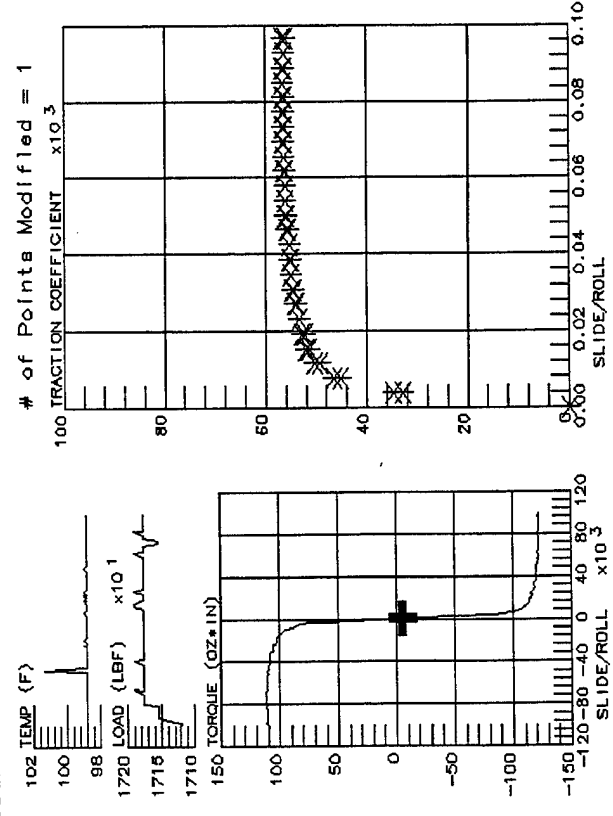
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #97
100F 21LBF 1260RPM 23 FILE: bq10012



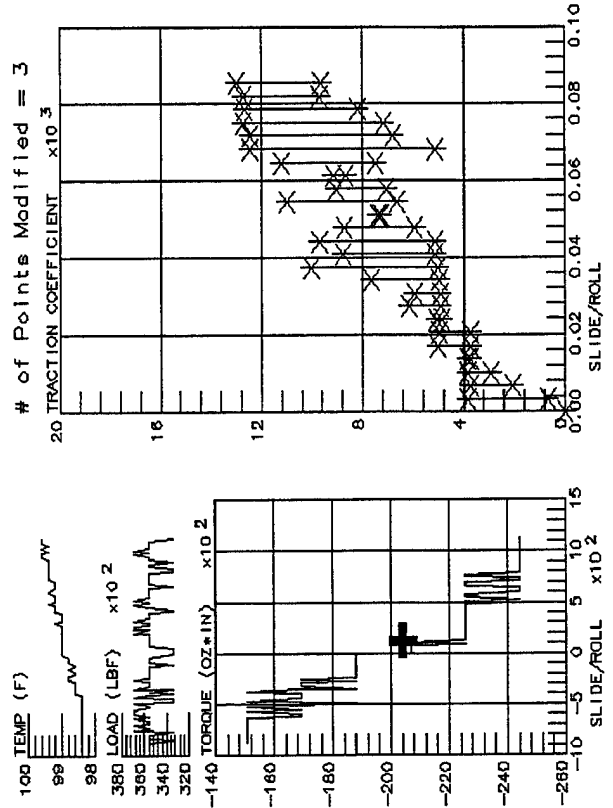
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #98
100F 72LBF 1260RPM 24 FILE: bq10012



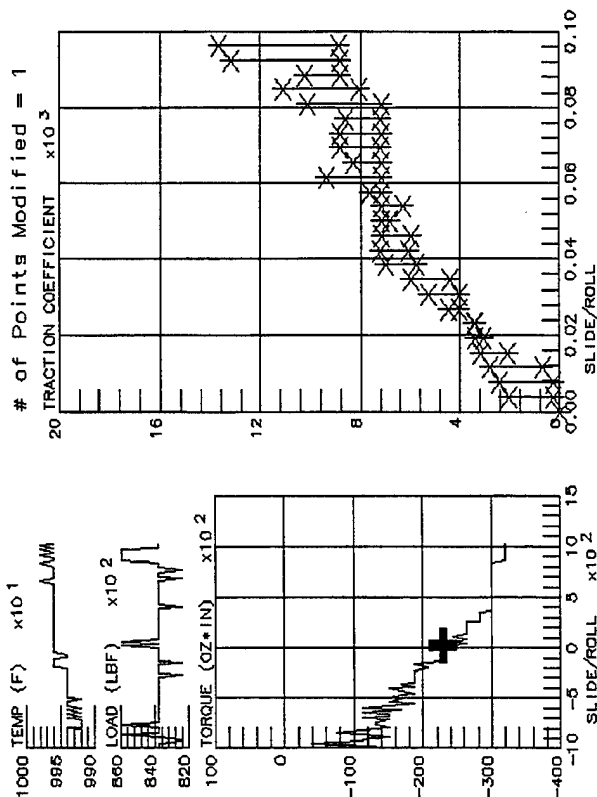
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #99
100F 172LBF 1260RPM 25 FILE: bq10012



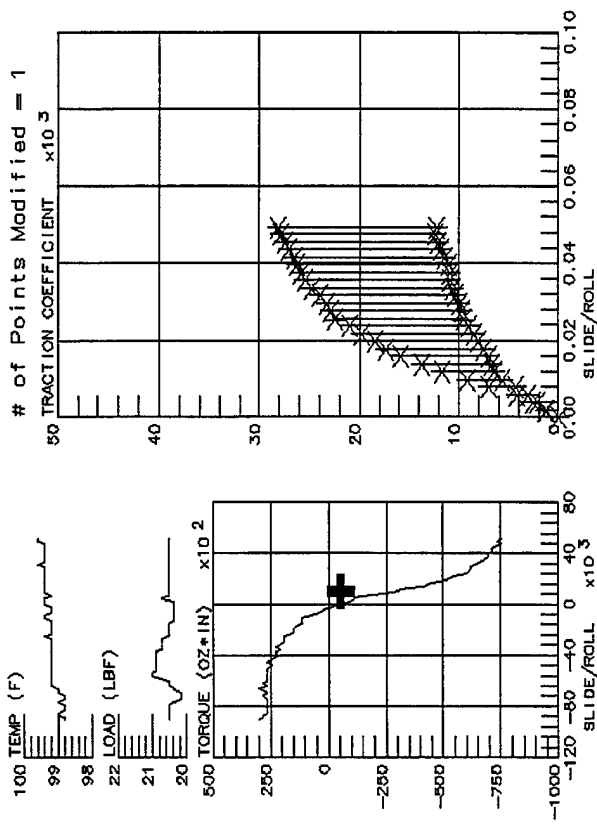
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #100
100F 3LBF 2559RPM 26 FILE: bq10012



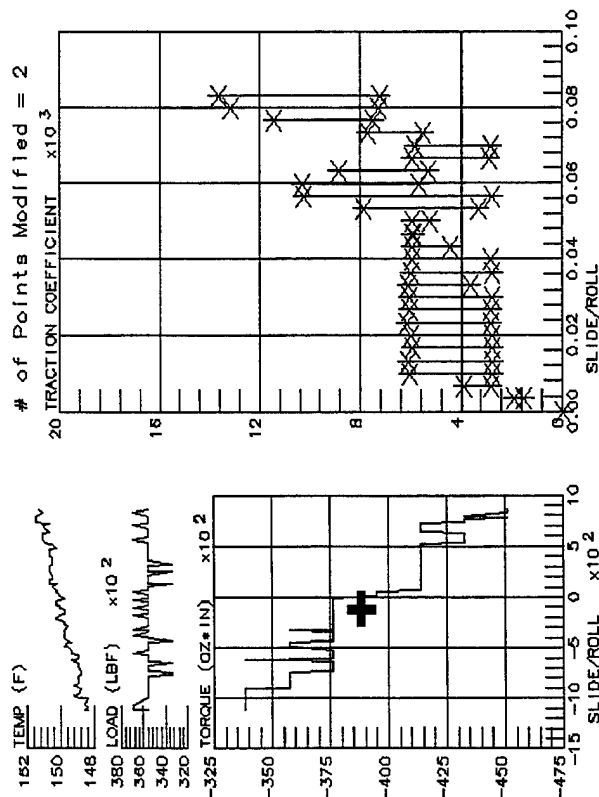
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #101
100F 8LBF 2569RPM 27 FILE: bq10012



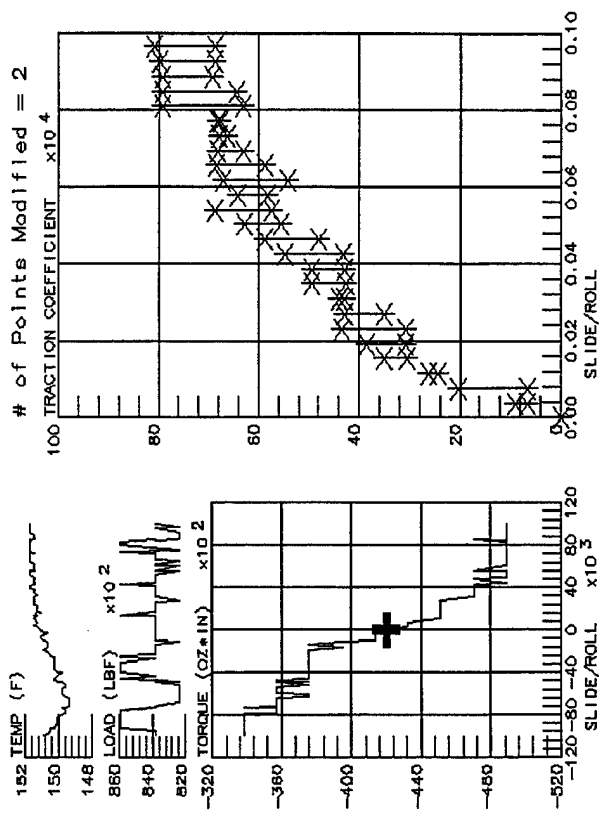
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #102
100F 21LBF 2569RPM 28 FILE: bq10012



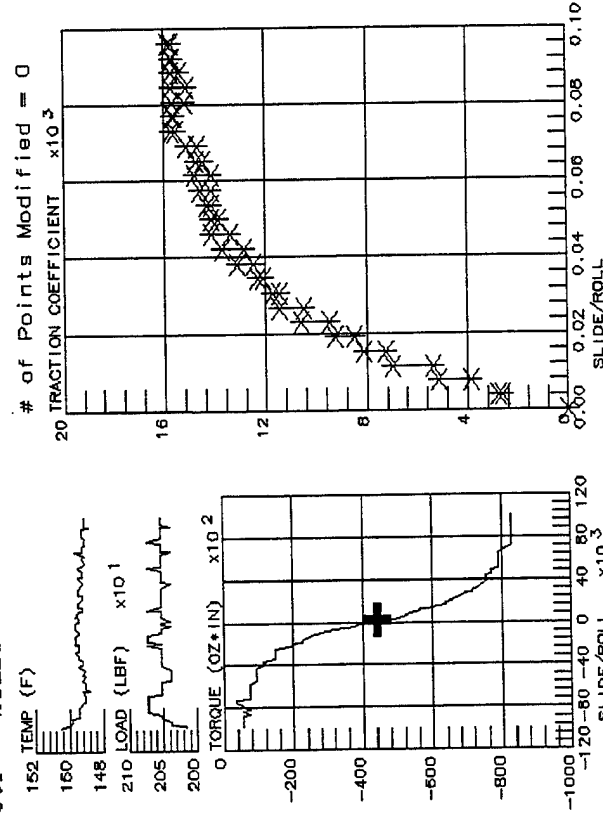
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #103
150F 3LBF 5080RPM 1 FILE: bq150h2



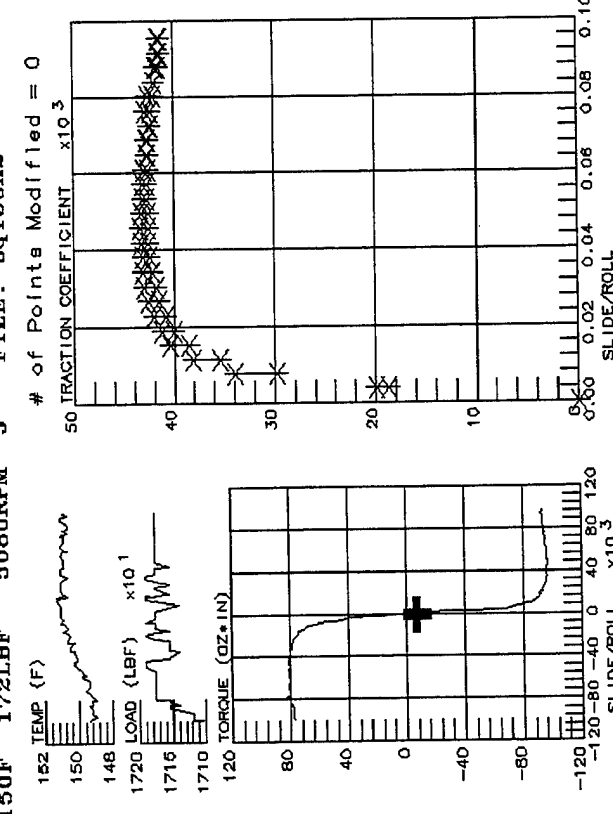
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #104
150F 8LBF 5080RPM 2 FILE: bq150h2



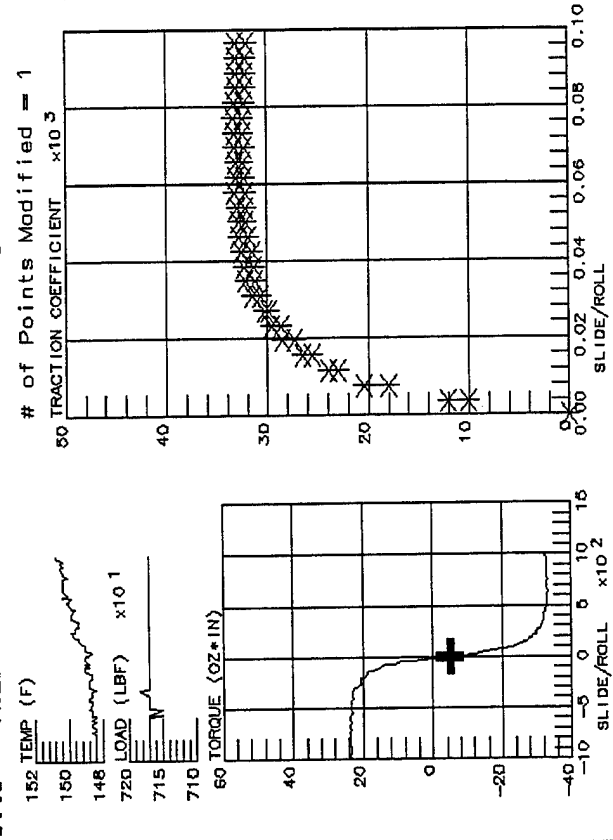
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #105
150F 21LBF 5080RPM 3 FILE: bq150h2



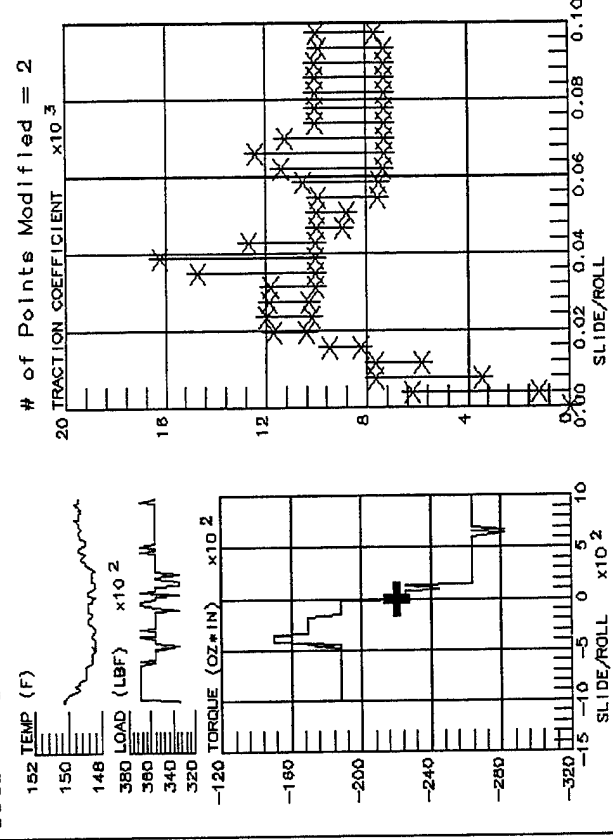
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #107
150F 172LBF 5080RPM 5 FILE: bq150h2



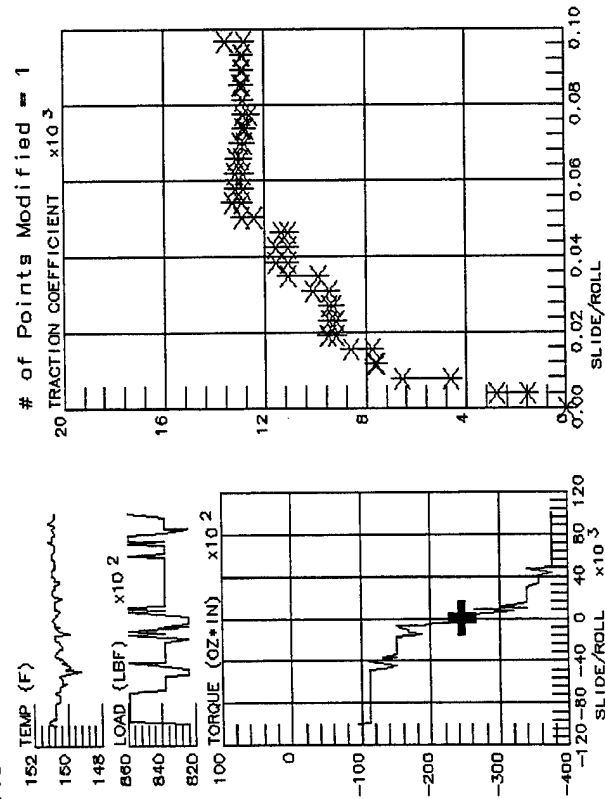
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #108
150F 72LBF 5080RPM 4 FILE: bq150h2



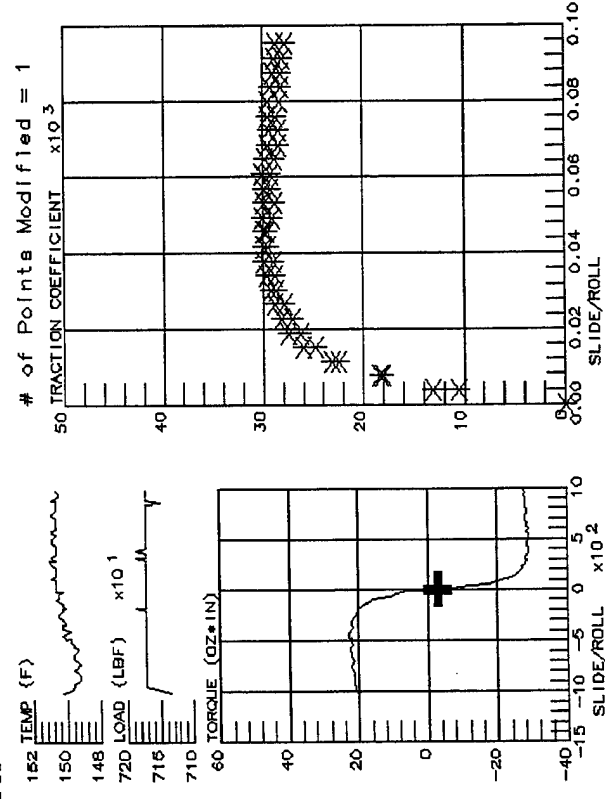
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #108
150F 3LBF 7639RPM 6 FILE: bq150h2



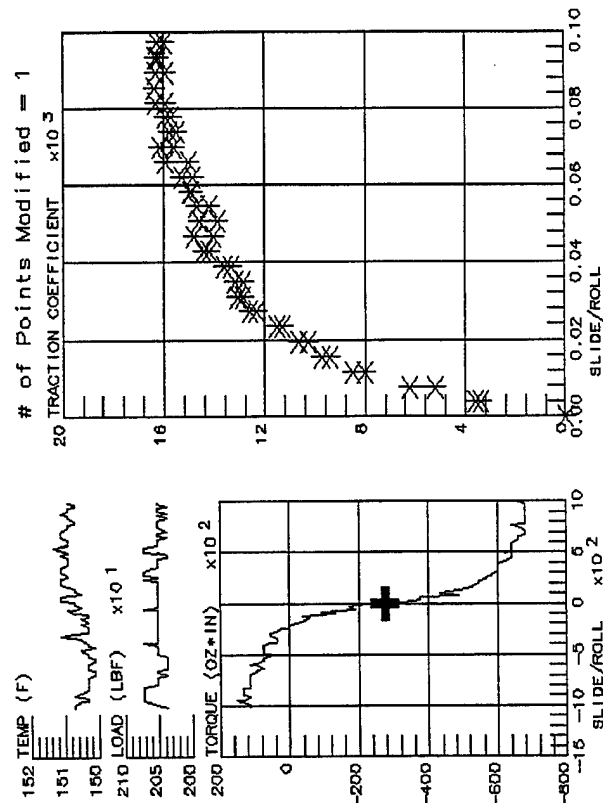
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #109
150F 8LBF 7639RPM 7 FILE: bq150h2



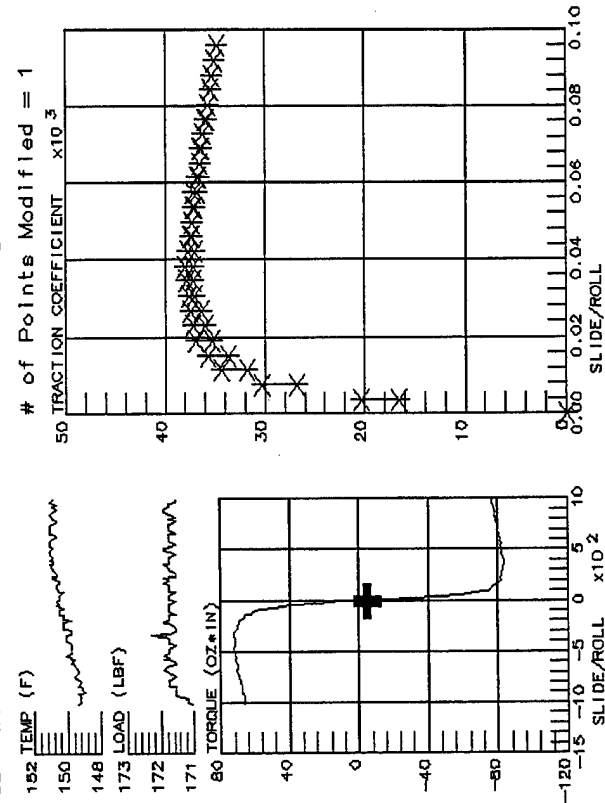
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #111
150F 72LBF 7639RPM 9 FILE: bq150h2



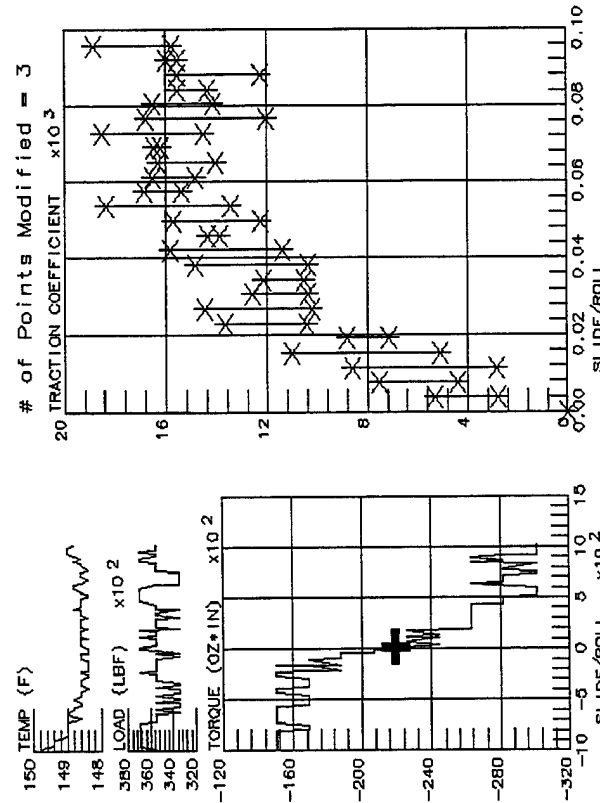
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #110
150F 21LBF 7639RPM 8 FILE: bq150h2



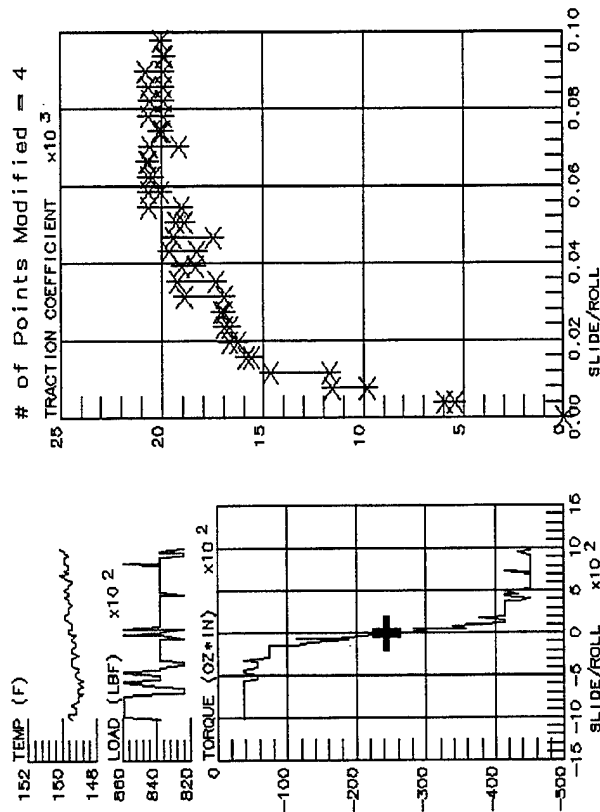
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #112
150F 172LBF 7639RPM 10 FILE: bq150h2



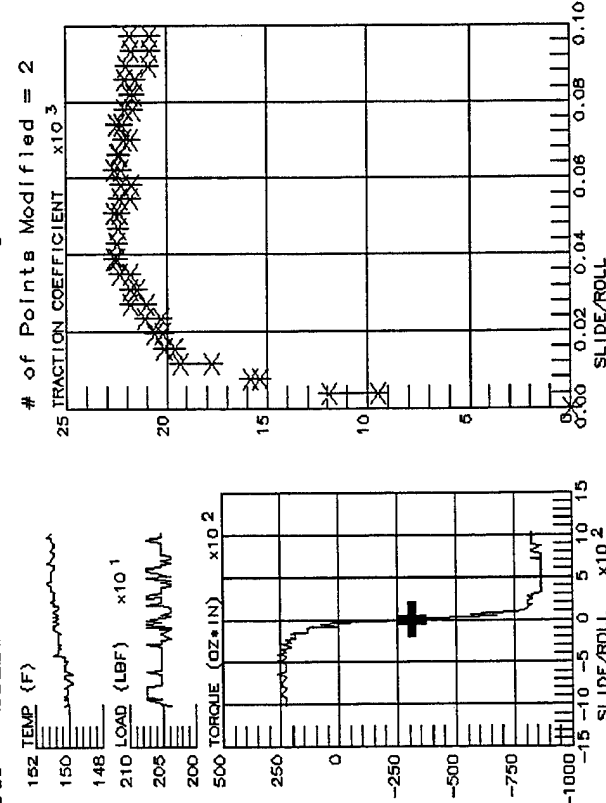
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #113
150F 3LBF 10198RPM 11 FILE: bq150h2



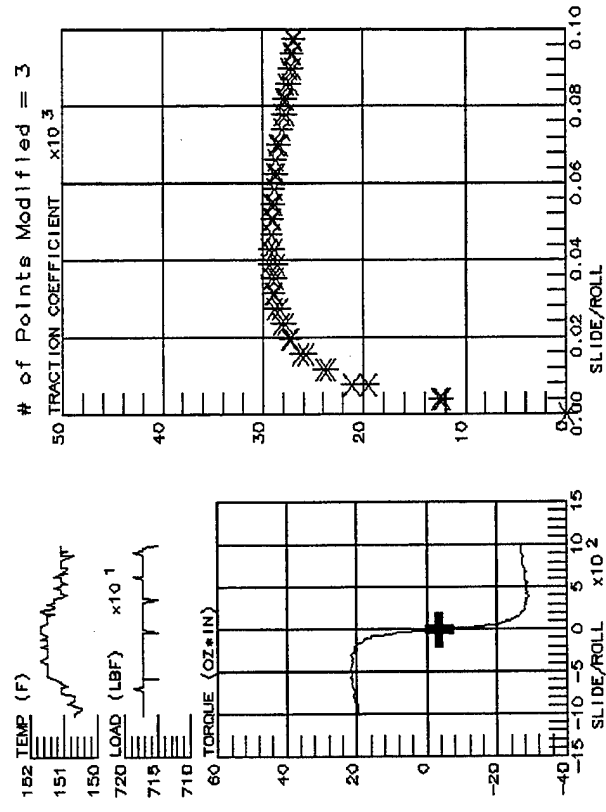
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #114
150F 8LBF 10198RPM 12 FILE: bq150h2



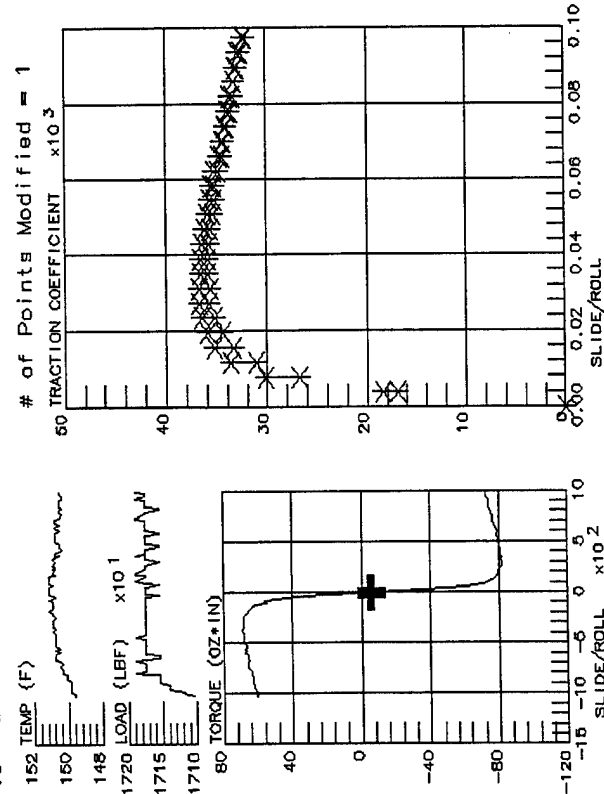
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #115
150F 21LBF 10198RPM 13 FILE: bq150h2



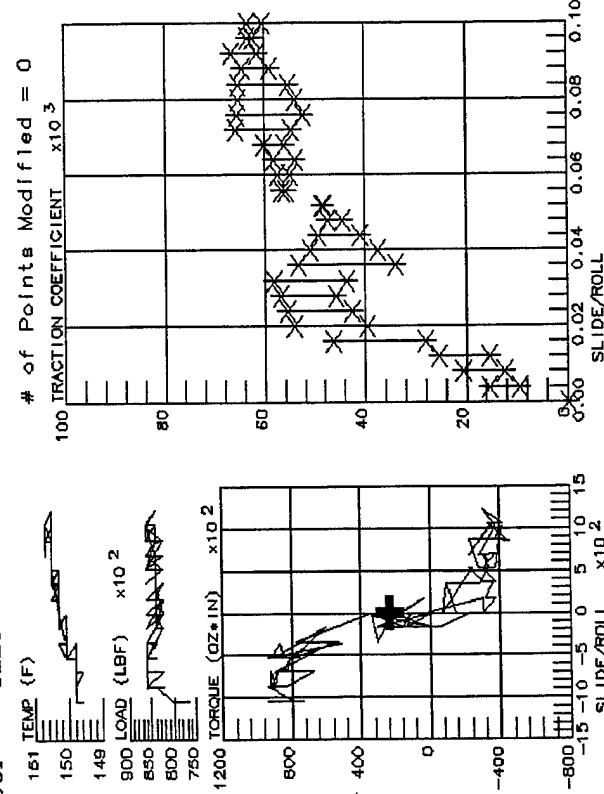
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #116
150F 72LBF 10198RPM 14 FILE: bq150h2



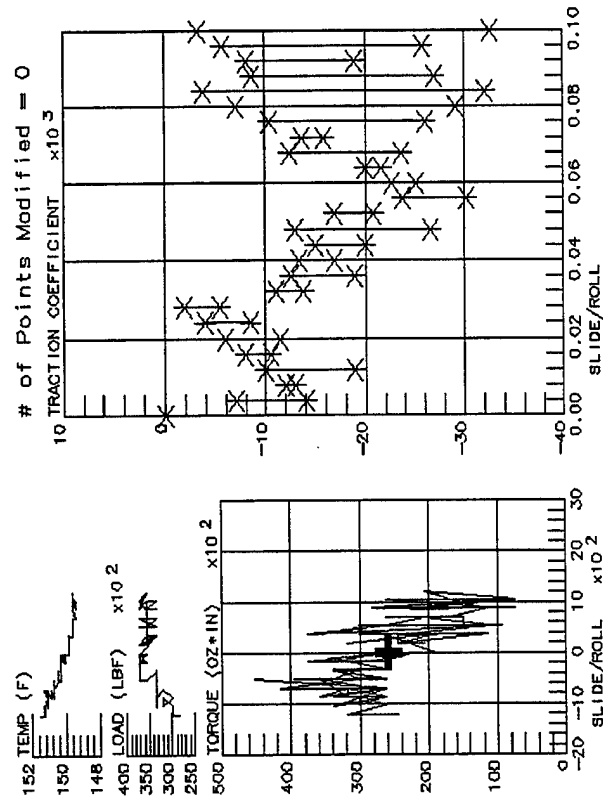
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #117
150F 172LBF 1019RPM 15 FILE: bq15012



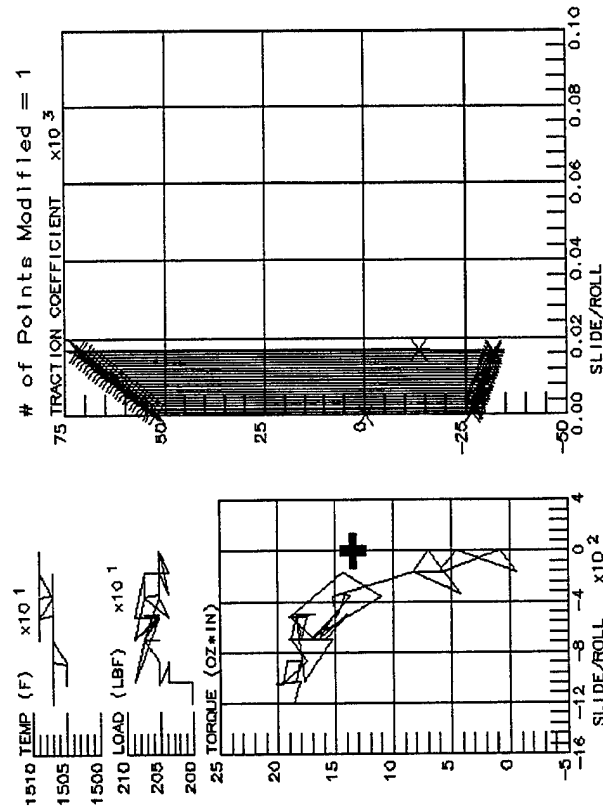
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #119
150F 81LBF 76RPM 2 FILE: bq15012



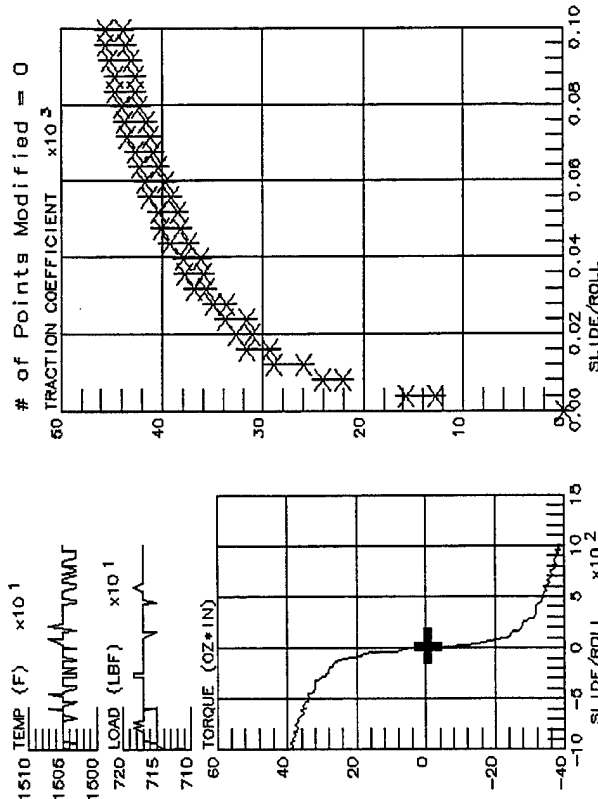
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #118
150F 3LBF 76RPM 1 FILE: bq15012



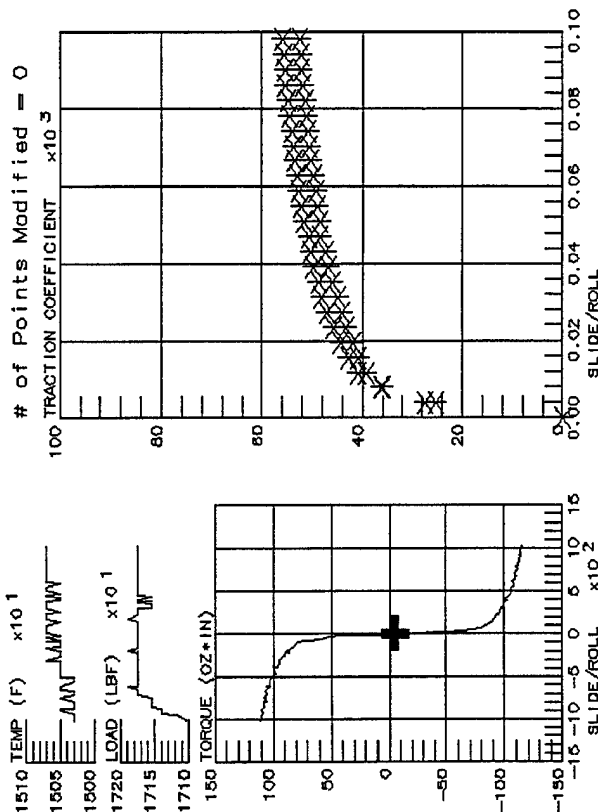
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #120
150F 21LBF 76RPM 3 FILE: bq15012



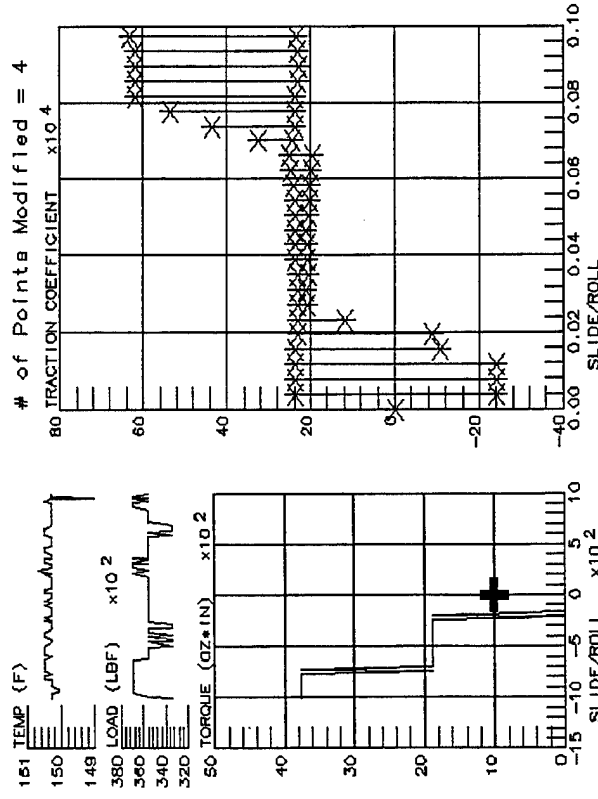
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #121
150F 72LBF 650RPM 19 FILE: bq15012



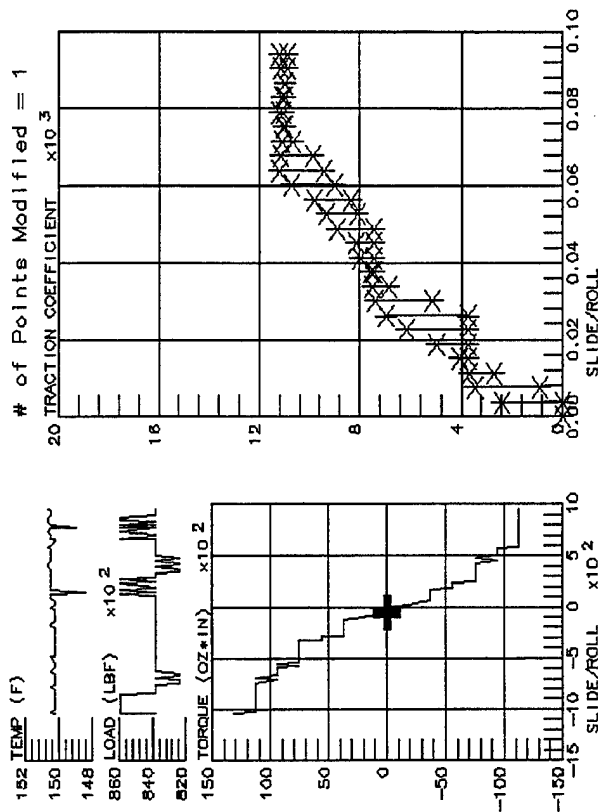
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #122
150F 172LBF 660RPM 20 FILE: bq15012



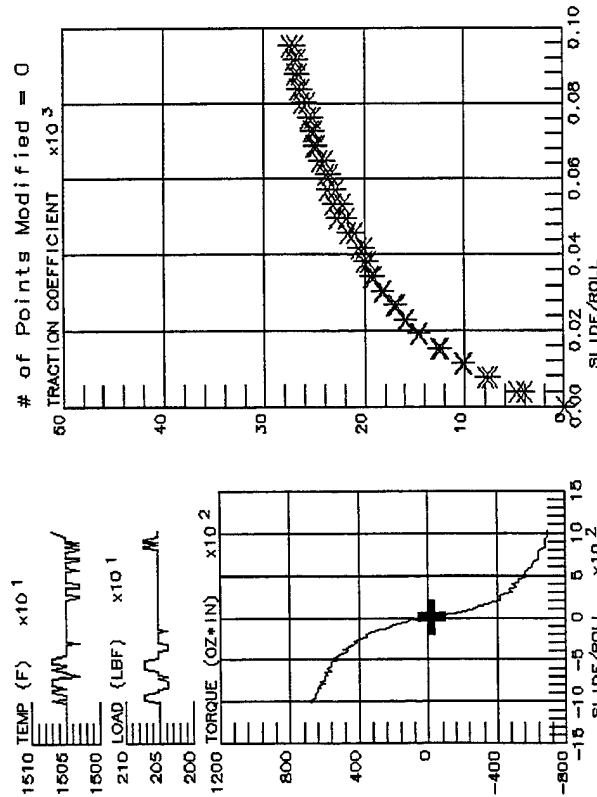
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #123
150F 3LBF 1260RPM 21 FILE: bq15012



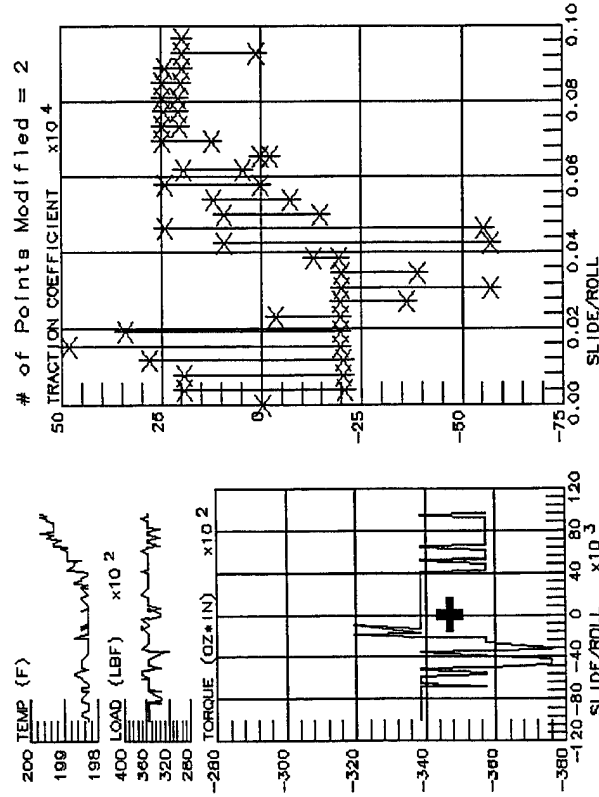
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #124
150F 8LBF 1260RPM 22 FILE: bq15012



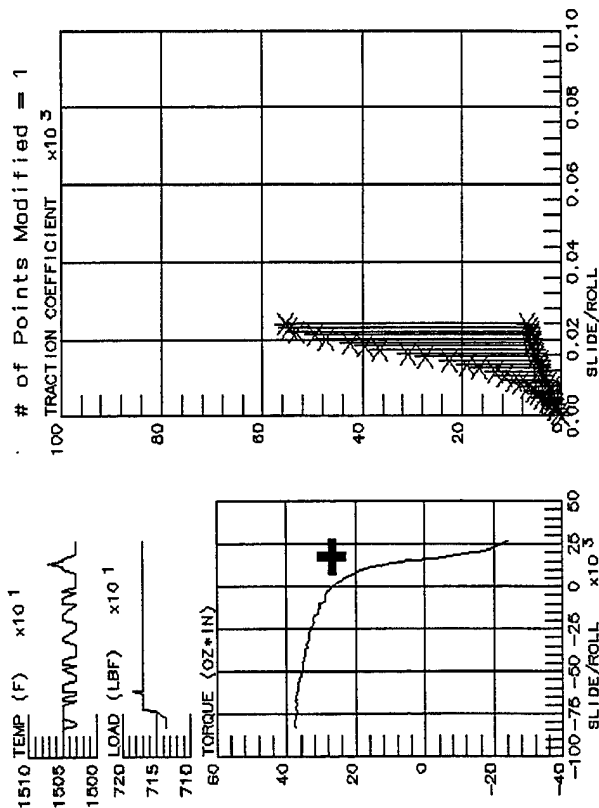
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #125
150F 21LBF 1260RPM 23 FILE: bq15012



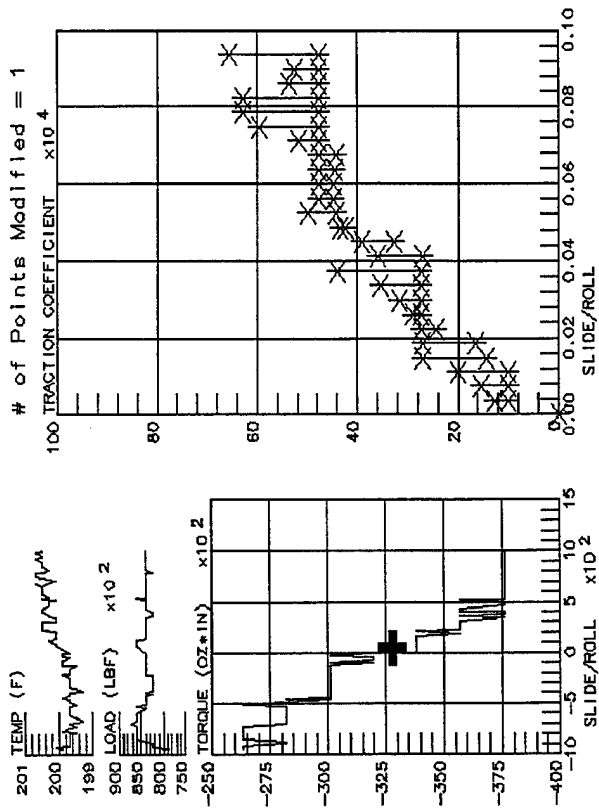
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #127
200F 3LBF 5080RPM 1 FILE: bq200h2



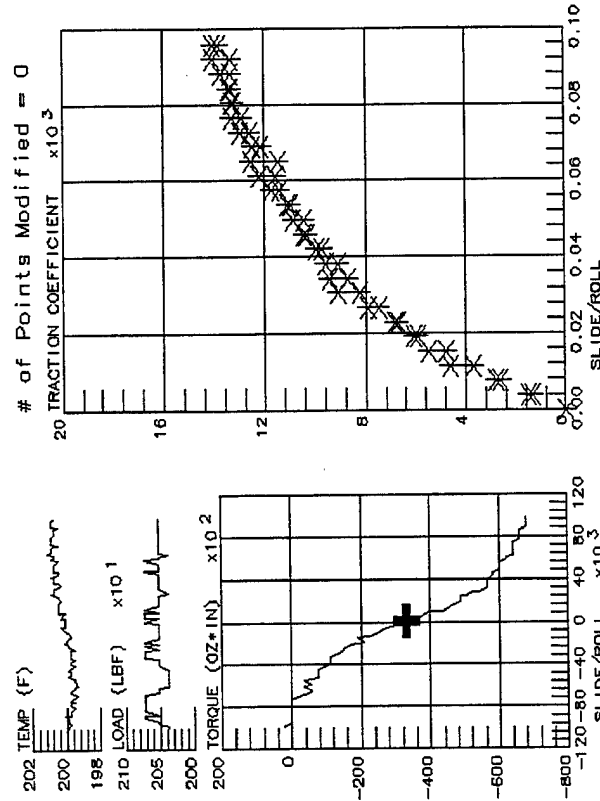
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #128
150F 72LBF 1260RPM 24 FILE: bq15012



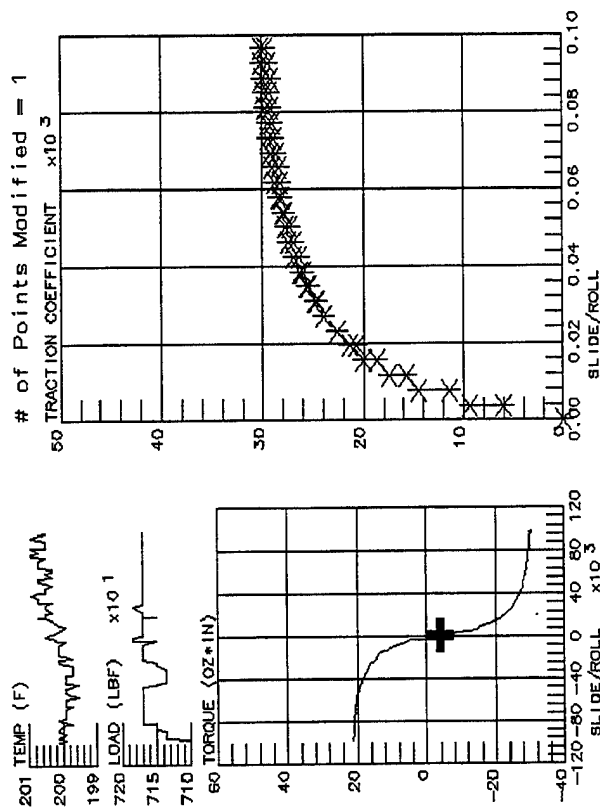
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #128
200F 8LBF 5080RPM 2 FILE: bq200h2



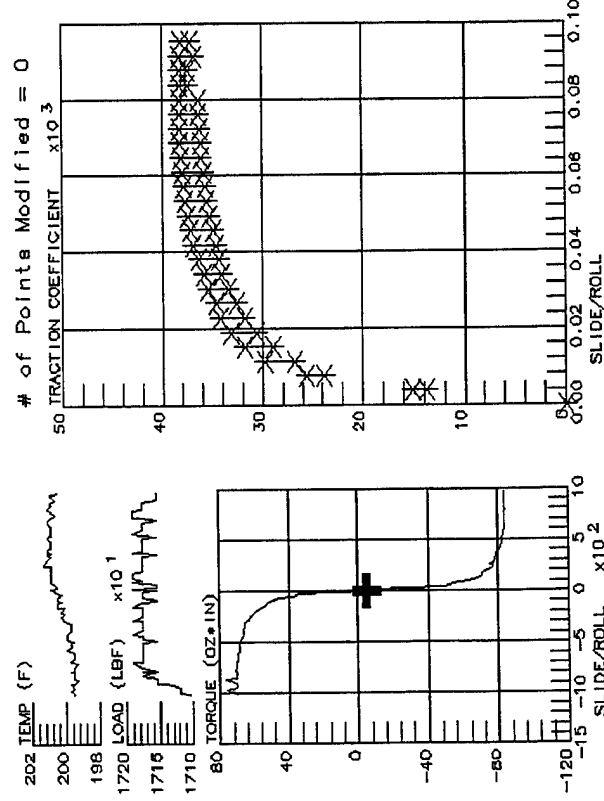
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #129
200F 21LBF 5080RPM 3 FILE: bq200h2



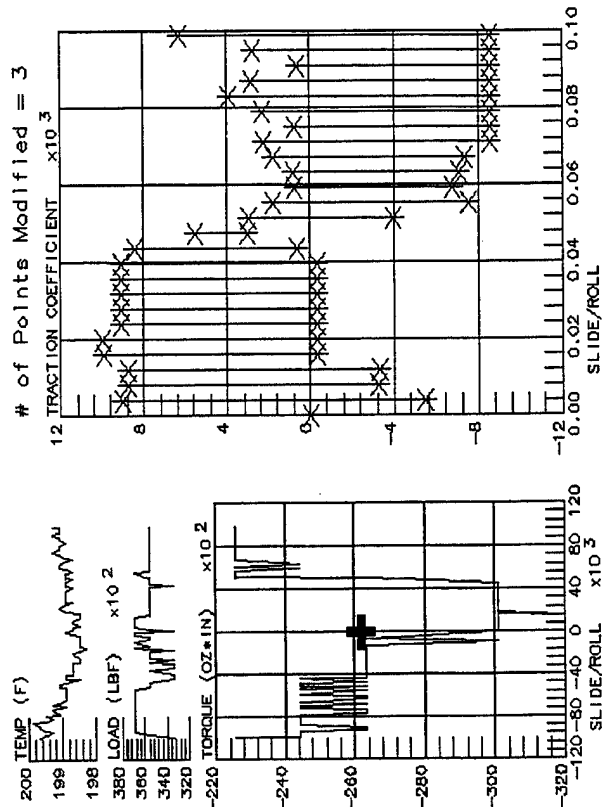
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #130
200F 72LBF 5080RPM 4 FILE: bq200h2



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #131
200F 172LBF 5080RPM 5 FILE: bq200h2

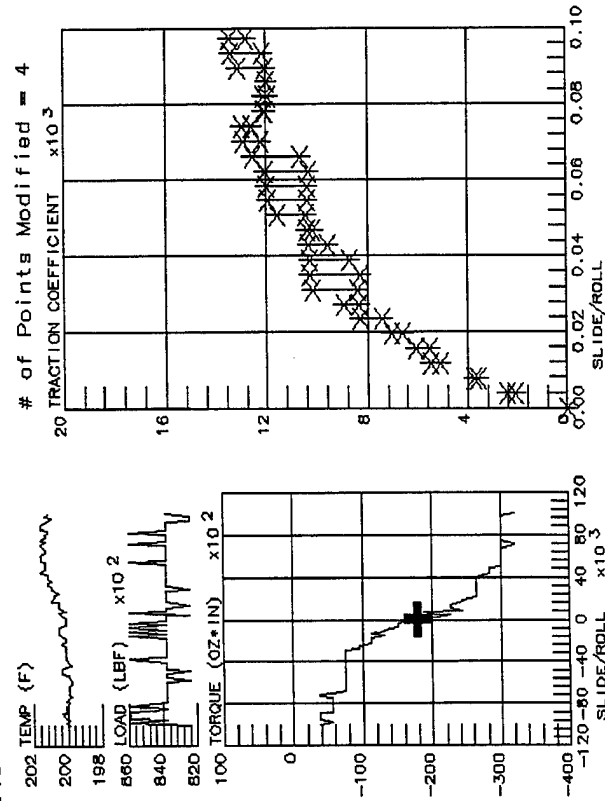


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #132
200F 3LBF 7639RPM 6 FILE: bq200h2



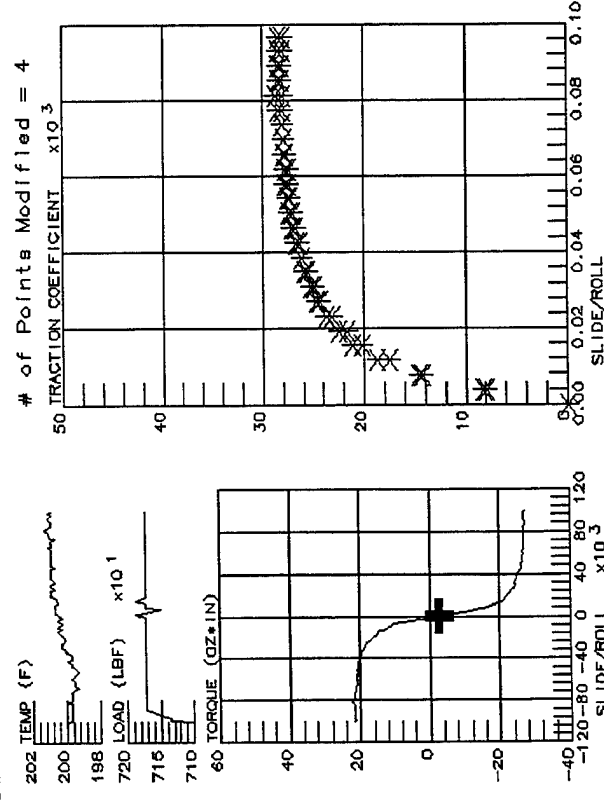
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #133
200F 81BF 7639RPM 7 FILE: bq200h2

of Points Modified = 4



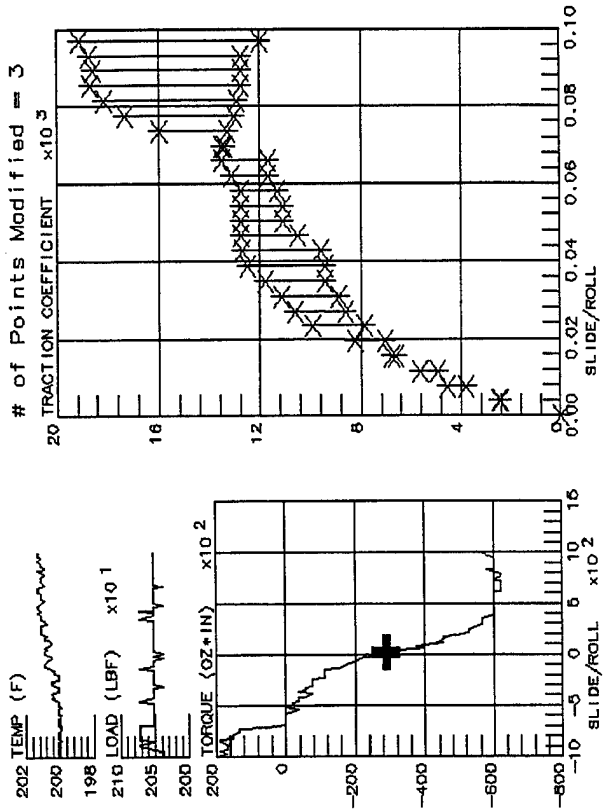
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #135
200F 72LBF 7639RPM 9 FILE: bq200h2

of Points Modified = 4



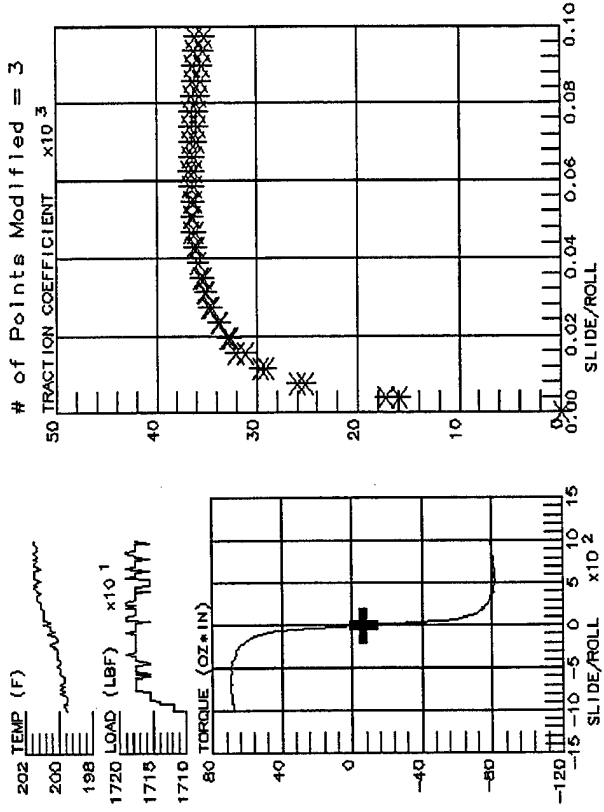
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #134
200F 21LBF 7639RPM 8 FILE: bq200h2

of Points Modified = 3



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #136
200F 172LBF 7639RPM 10 FILE: bq200h2

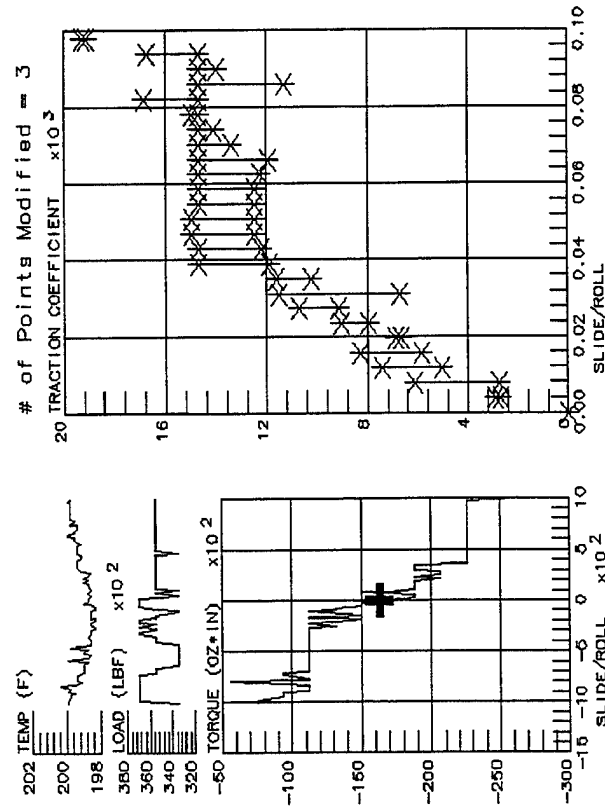
of Points Modified = 3



গণিতের ক্ষেত্রে ন্যূনতম

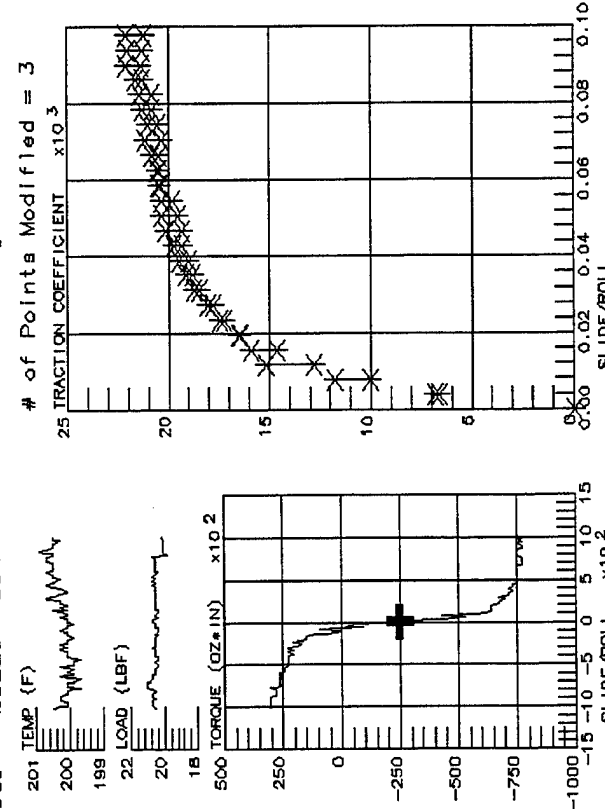
2200F 3LBF 10198RPM 11 FILE: bq200h2
81-288 ApiezonC+5%Bardhal (VacKote) #137

of Points Modified = 3



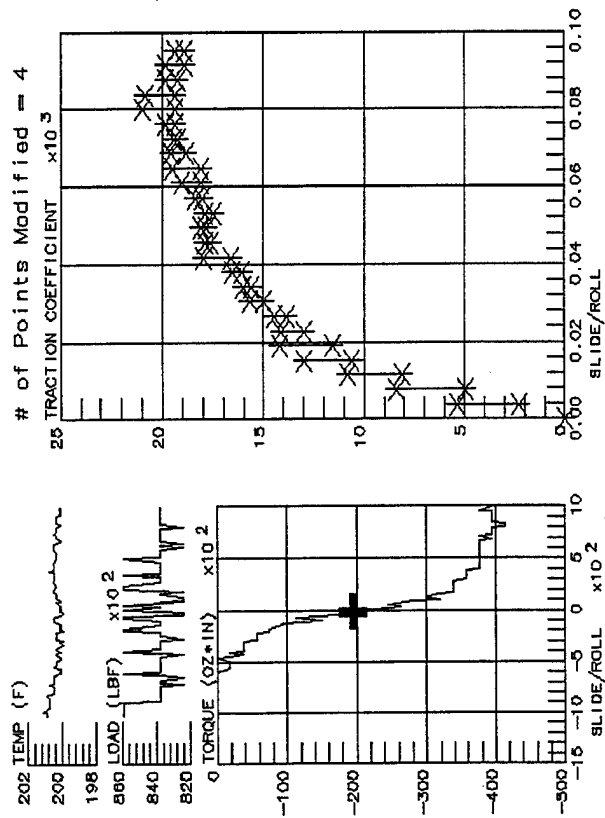
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #139
200F 21LBF 10198RPM 13 FILE: bq200h2

of Points Modified = 3



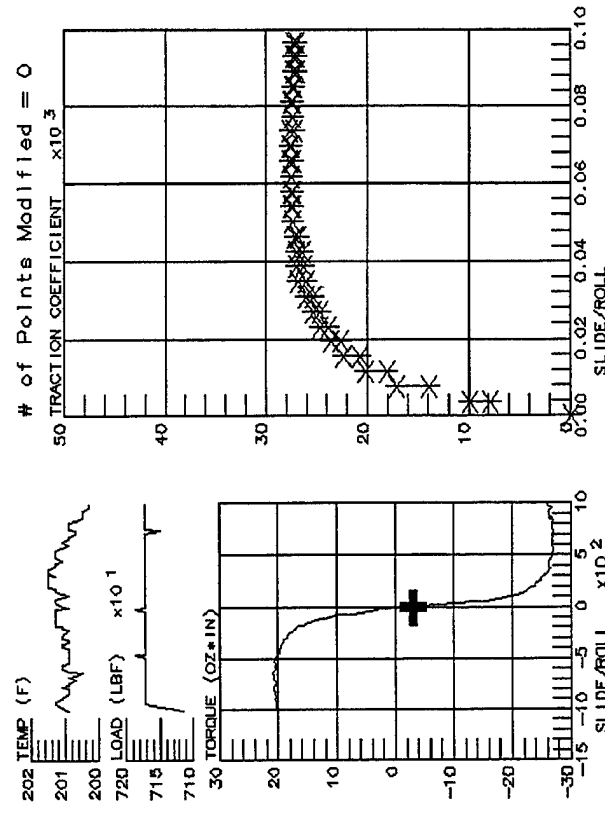
BQ 81-288 AplezonC+5%Bardhal(VacKote) #138
200F 8LBF 10198RFM 12 FILE: bq200h2

of Points Modified = 4

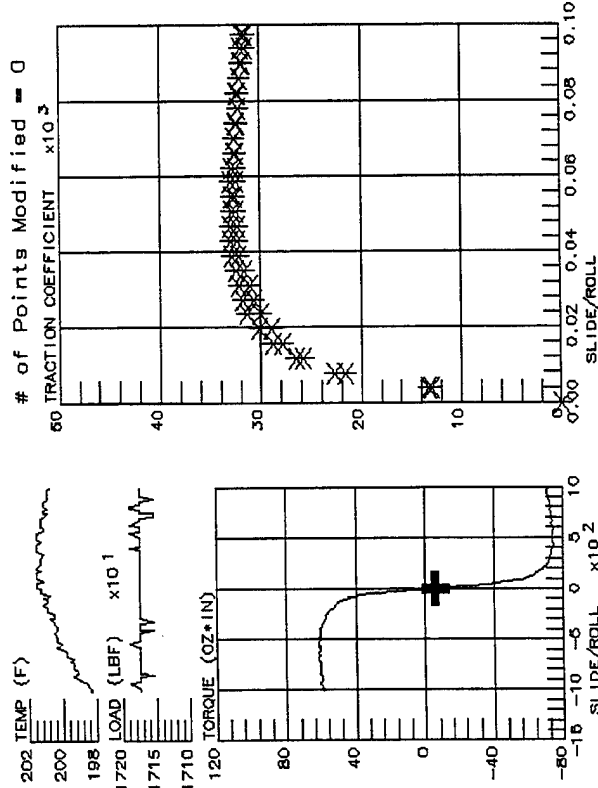


BQ 81-288 ApiezonC+5%Bardhal(VackOte) #140
200F 10198RPM 14 FILE: bq200b2
72LBF

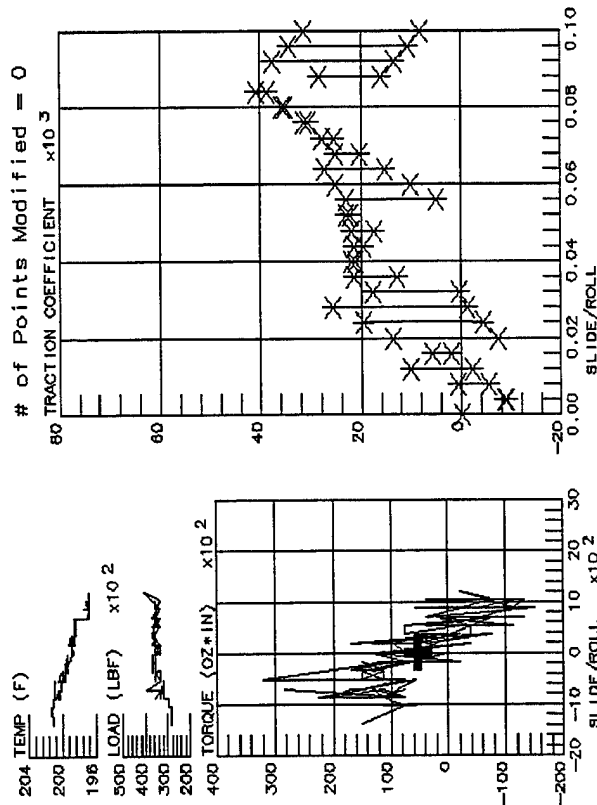
of Points Modified = 0



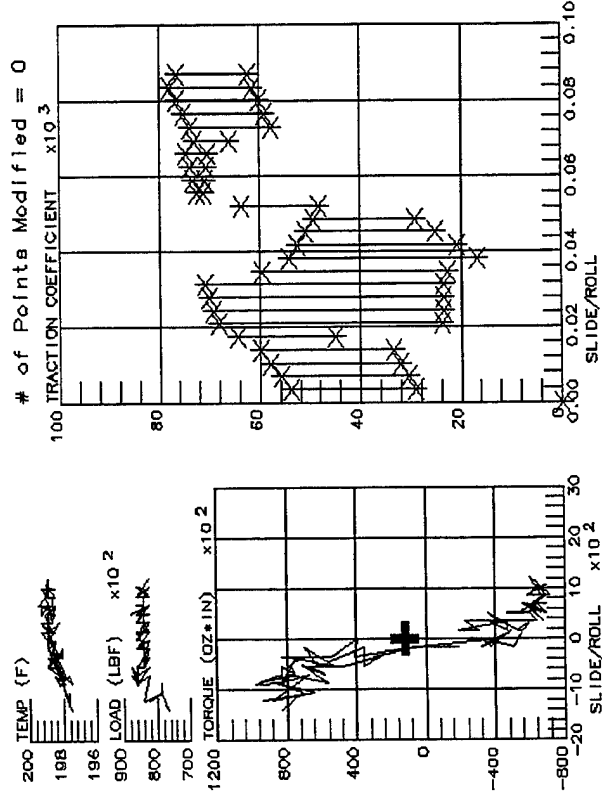
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #141
200F 172LBF 1019RPM 15 FILE: bq200h2



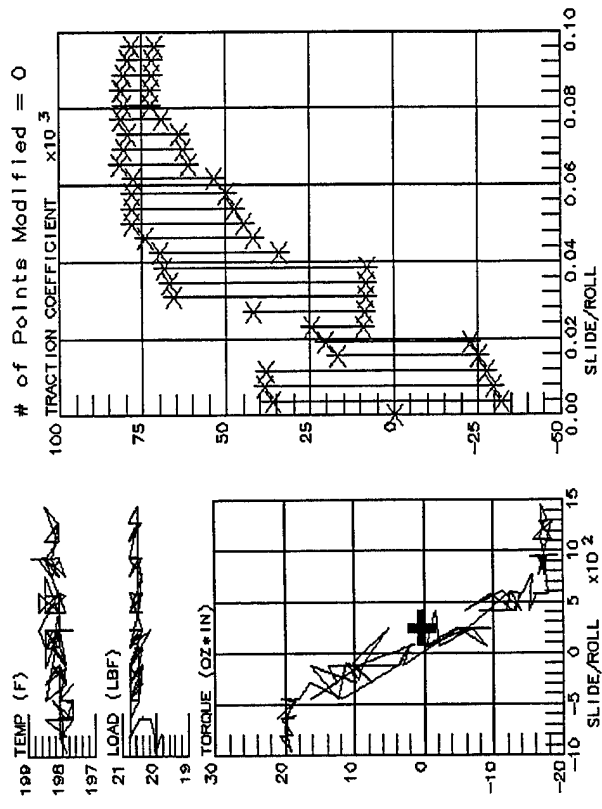
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #142
200F 3LBF 76RPM 1 FILE: bq200i2



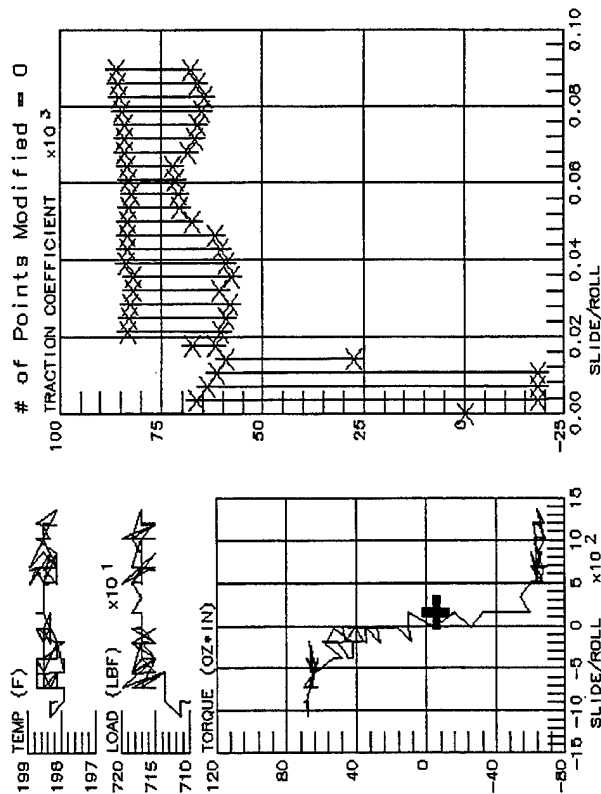
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #143
200F 8LBF 76RPM 2 FILE: bq200i2



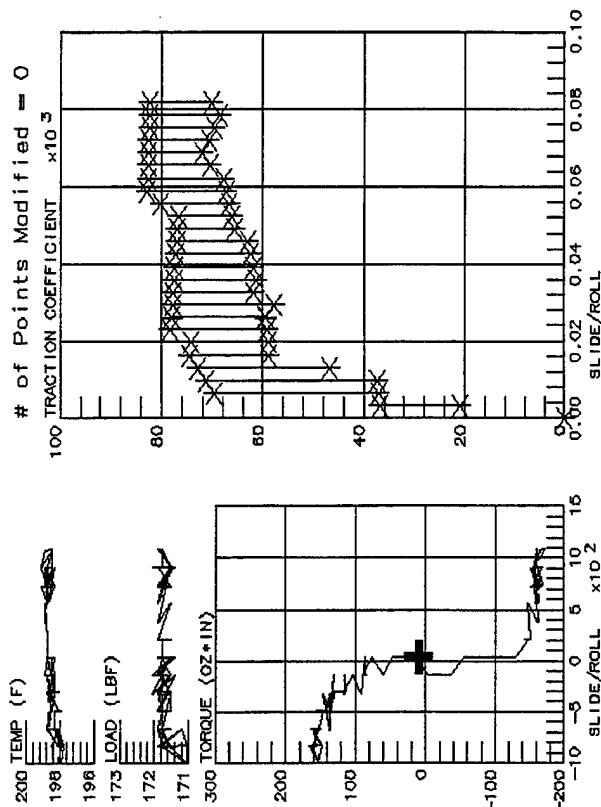
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #144
200F 21LBF 76RPM 3 FILE: bq200i2



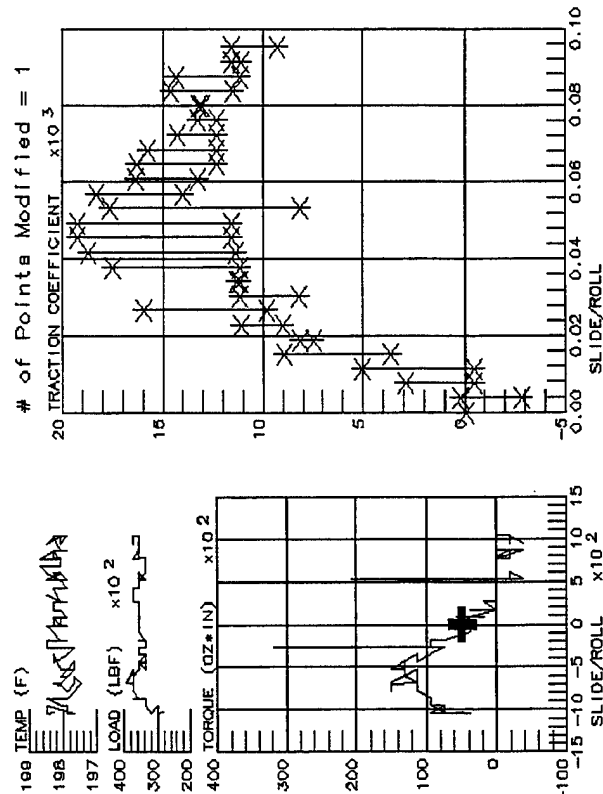
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #145
200F 72LBF 76RPM 4 FILE: bq20012



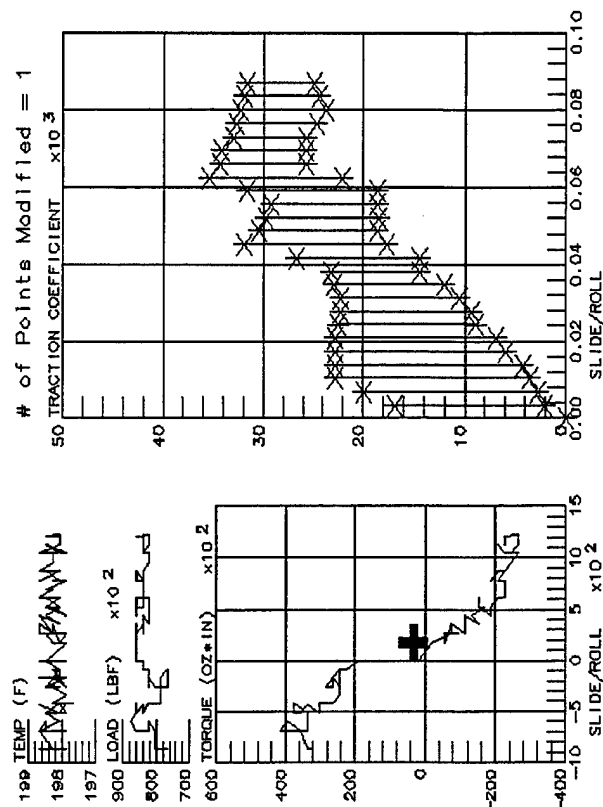
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #148
200F 172LBF 76RPM 5 FILE: bq20012



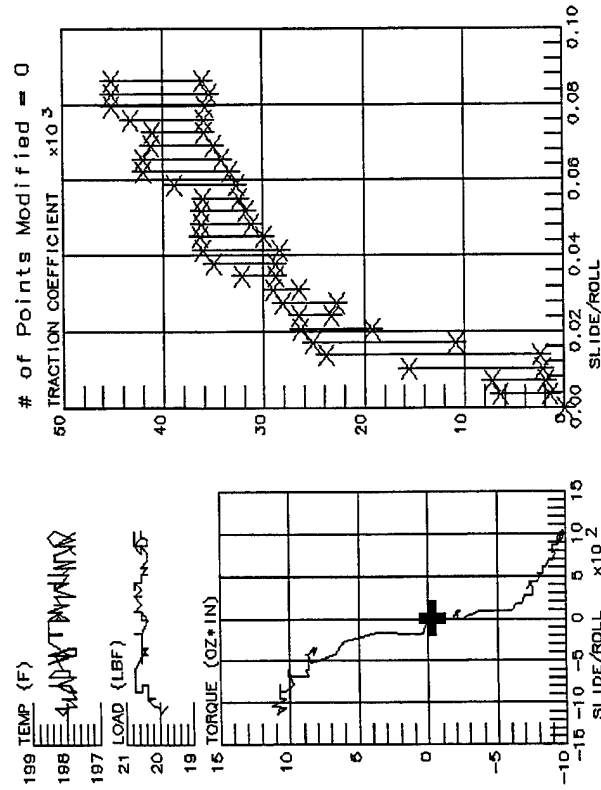
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #147
200F 3LBF 152RPM 6 FILE: bq20012



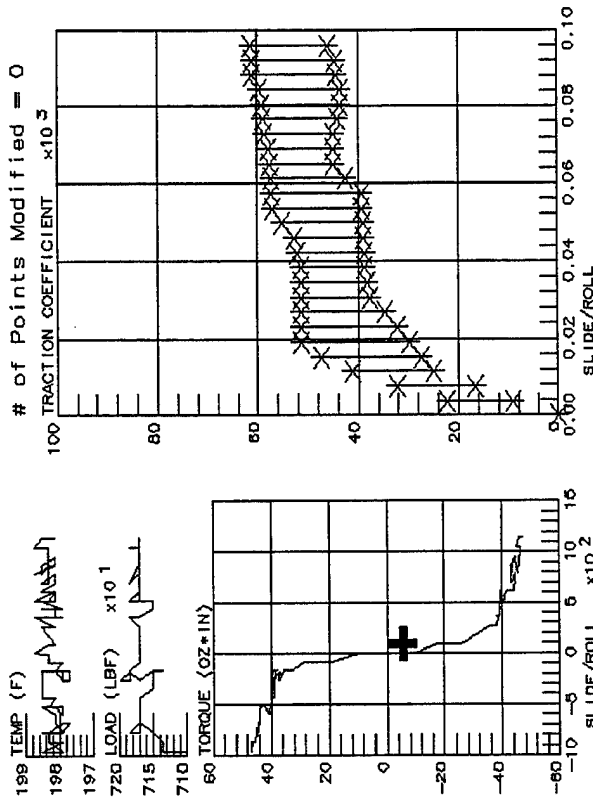
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #148
200F 8LBF 152RPM 7 FILE: bq20012



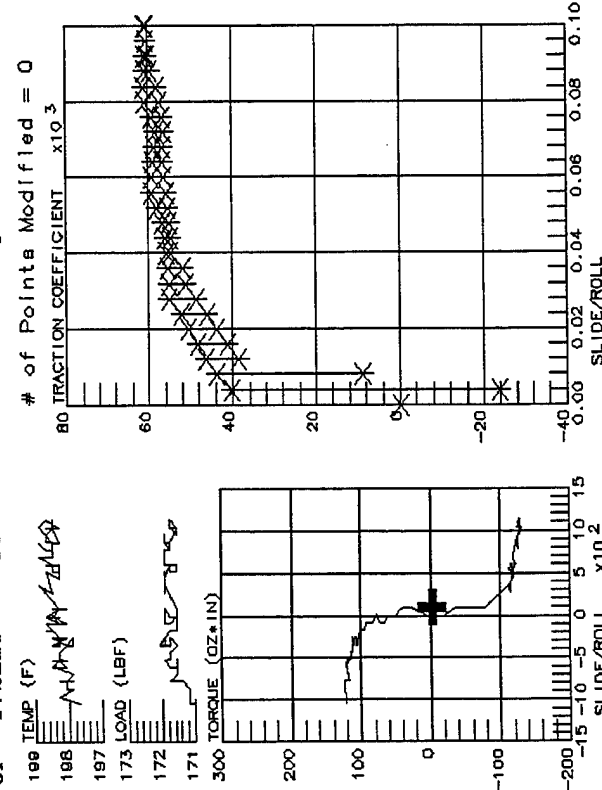
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #149
200F 21LBF 152RPM 8 FILE: bq20012



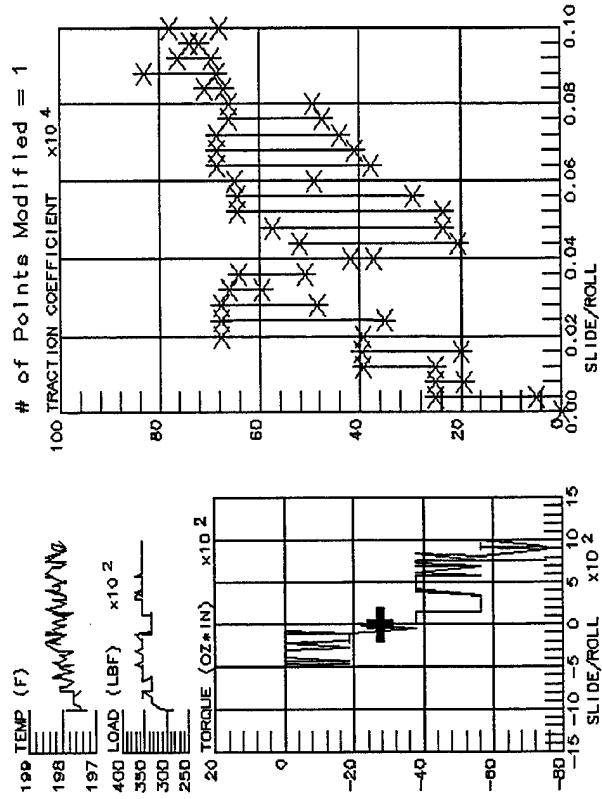
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #150
200F 72LBF 152RPM 9 FILE: bq20012



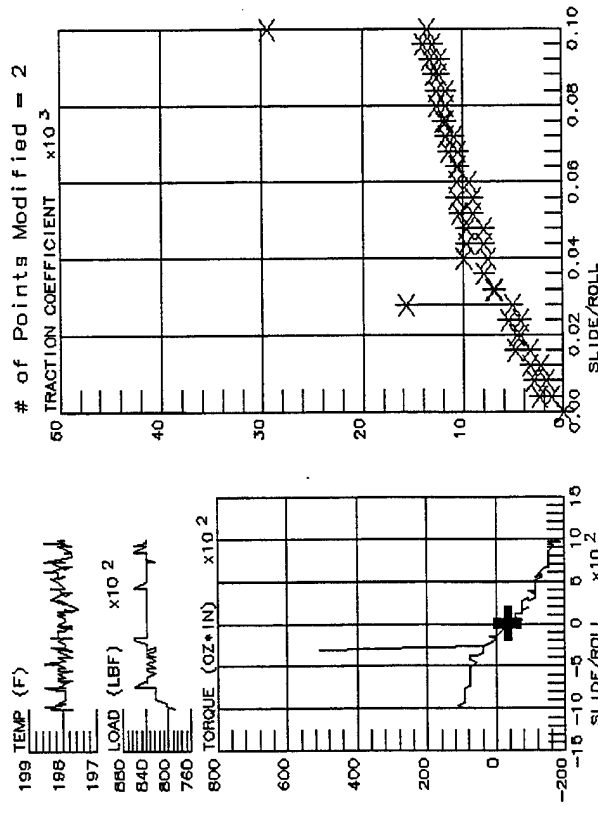
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #151
200F 172LBF 152RPM 10 FILE: bq20012



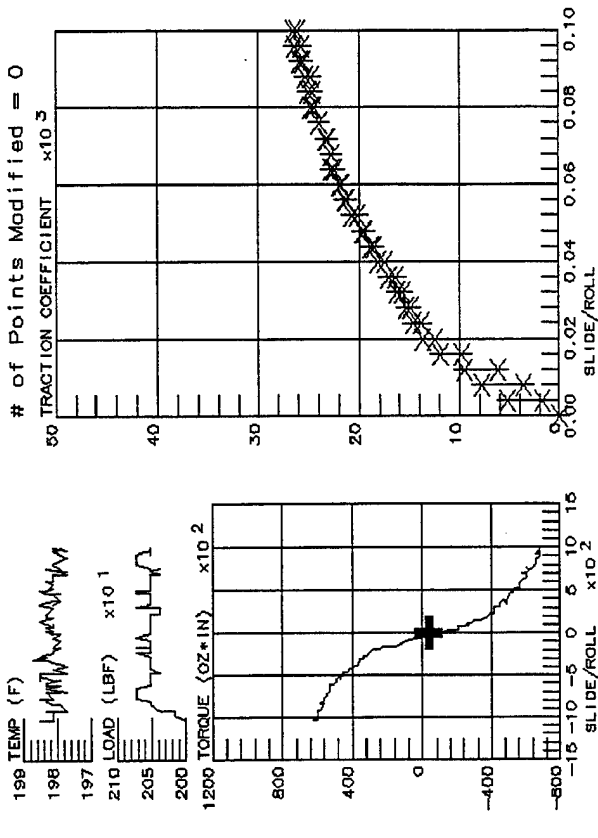
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #152
200F 3LBF 343RPM 11 FILE: bq20012



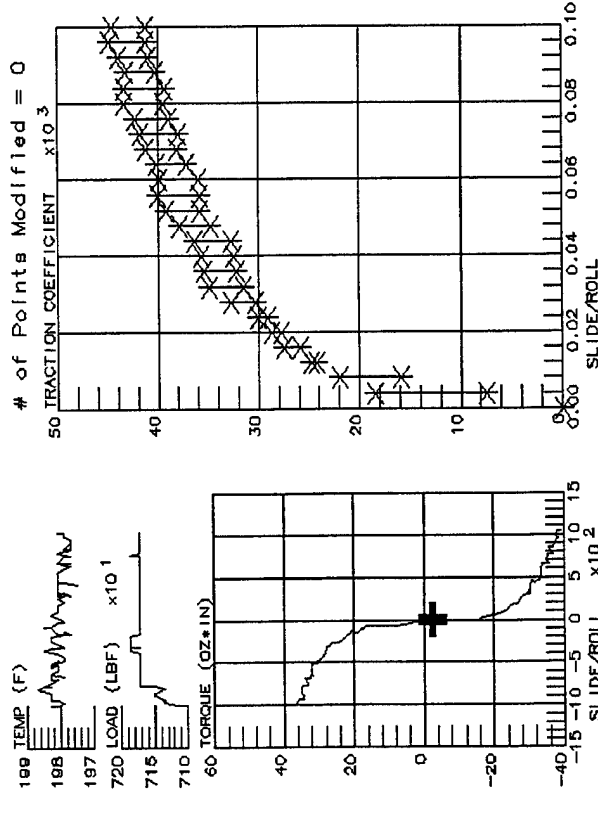
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #153
200F 81BF 343RPM 12 FILE: bq20012



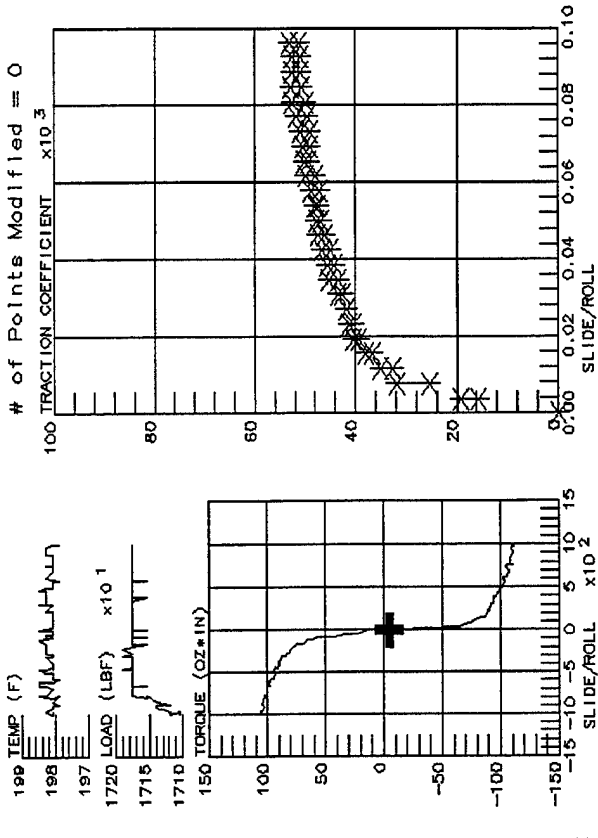
BQ 81-288 ApiezonC+5%Bardhal(Vackote) #154
200F 81BF 343RPM 13 FILE: bq20012



BQ 81-288 ApiezonC+5%Bardhal(Vackote) #155
200F 72LBF 343RPM 14 FILE: bq20012

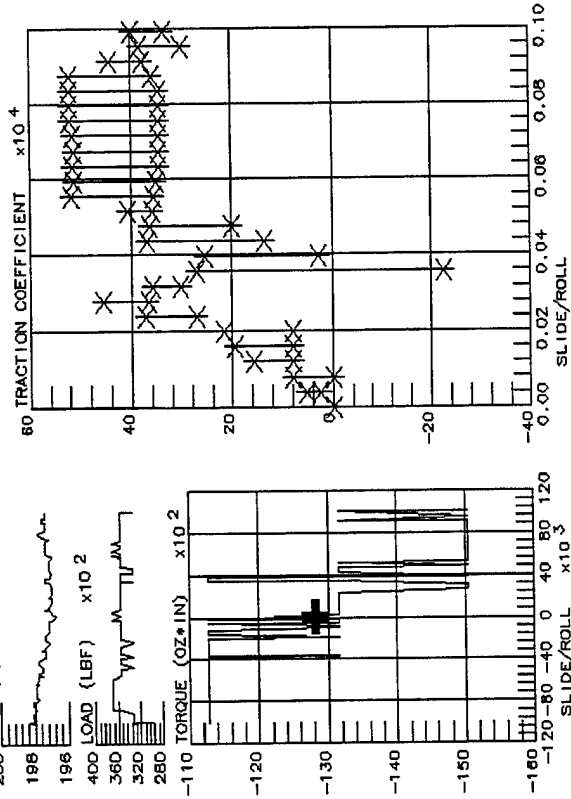


BQ 81-288 ApiezonC+5%Bardhal(Vackote) #156
200F 172LBF 343RPM 15 FILE: bq20012



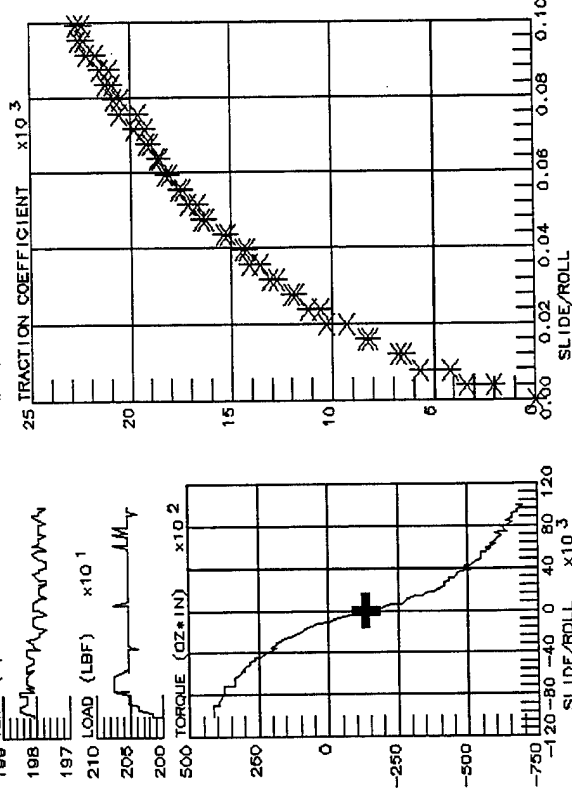
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #157
200F 3LBF 650RPM 16 FILE: bq20012

of Points Modified = 2



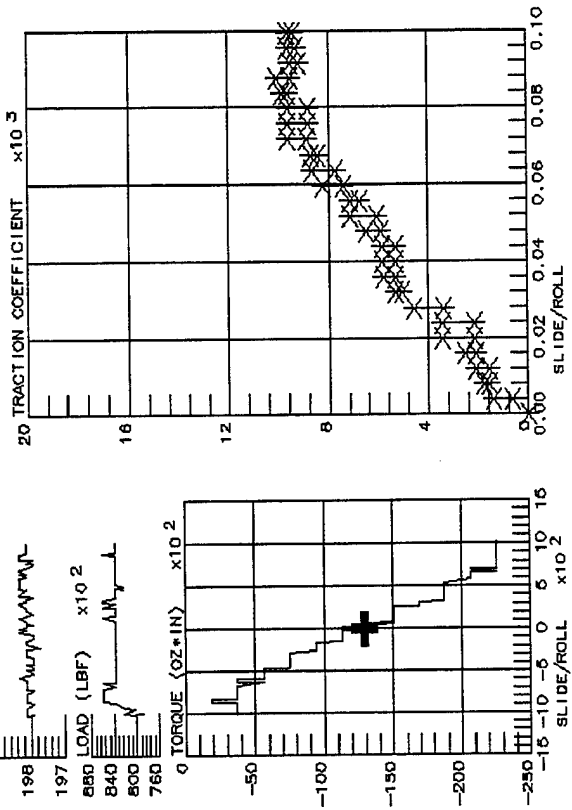
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #159
200F 21LBF 650RPM 18 FILE: bq20012

of Points Modified = 2



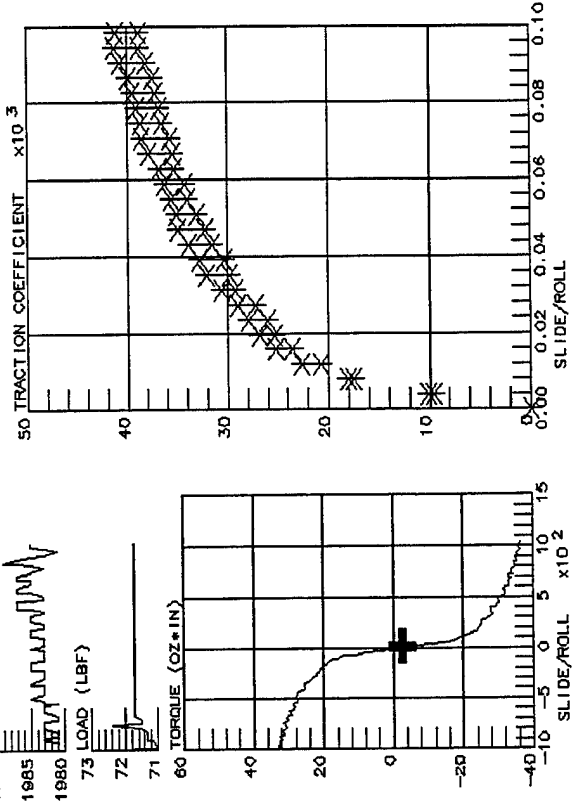
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #158
200F 8LBF 650RPM 17 FILE: bq20012

of Points Modified = 0

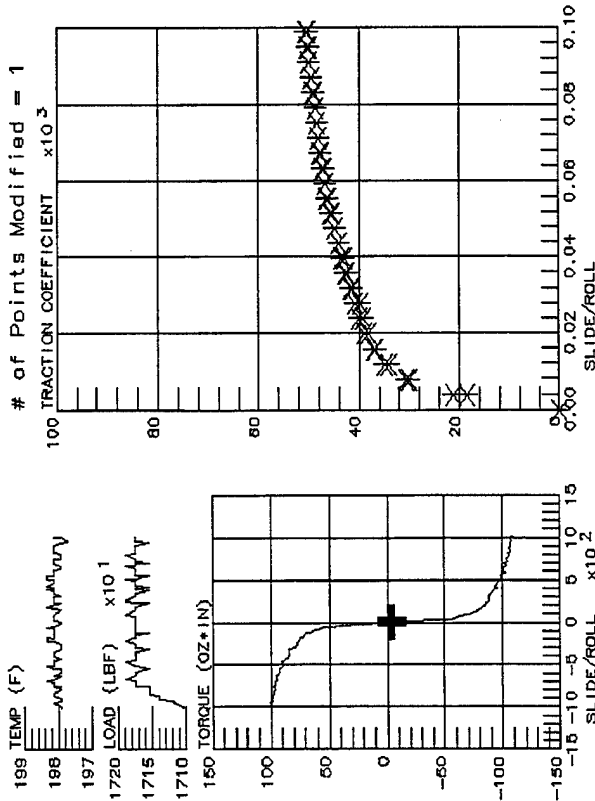


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #160
200F 72LBF 650RPM 19 FILE: bq20012

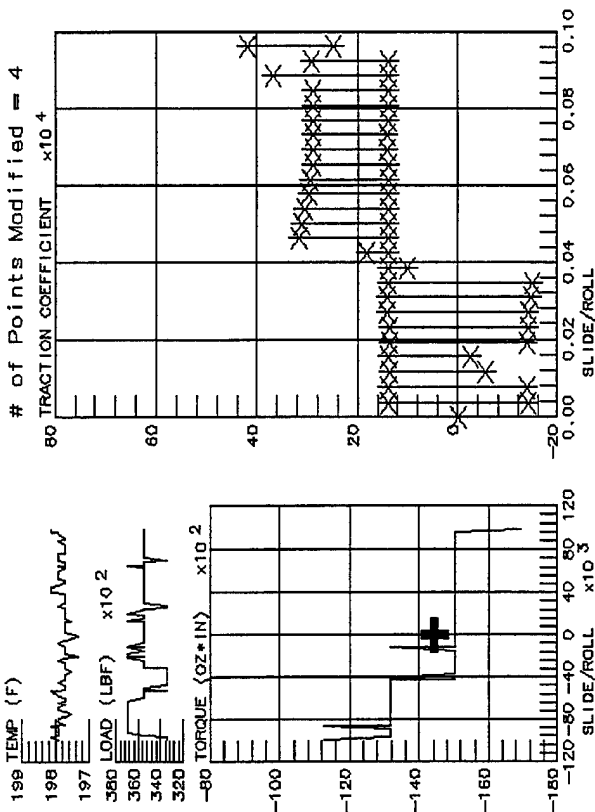
of Points Modified = 0



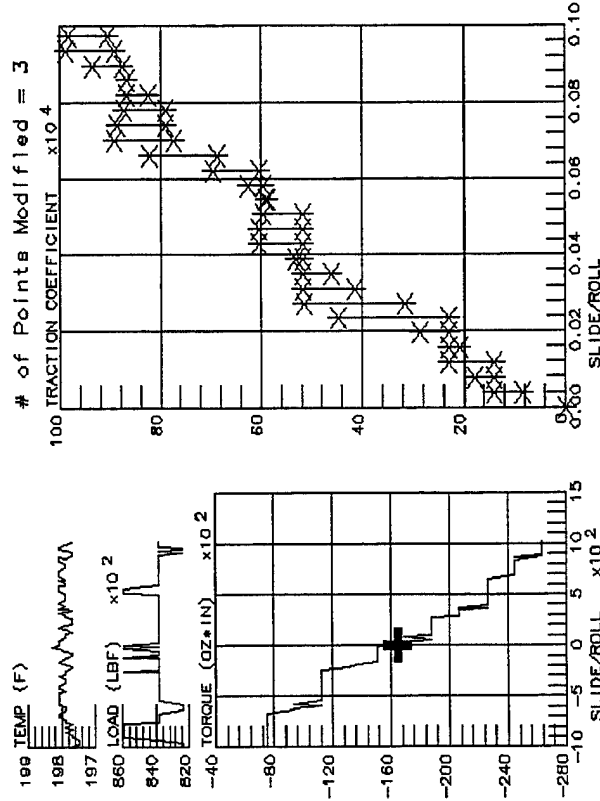
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #161
200F 172LBF 650RPM 20 FILE: bq20012



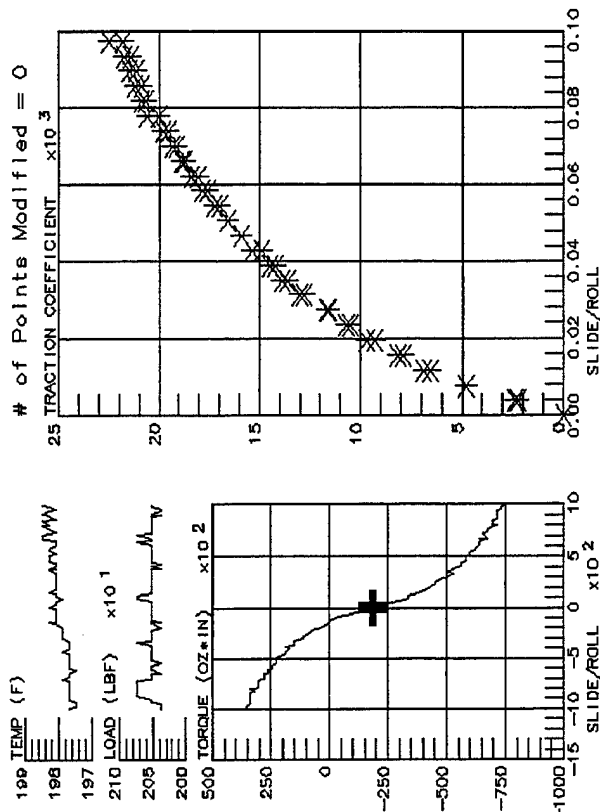
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #162
200F 3LBF 1260RPM 21 FILE: bq20012



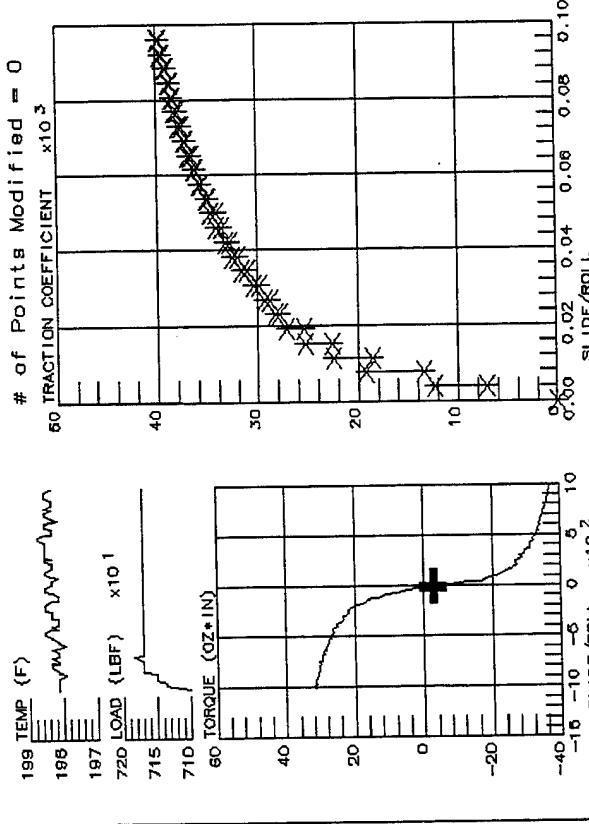
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #163
200F 8LBF 1260RPM 22 FILE: bq20012



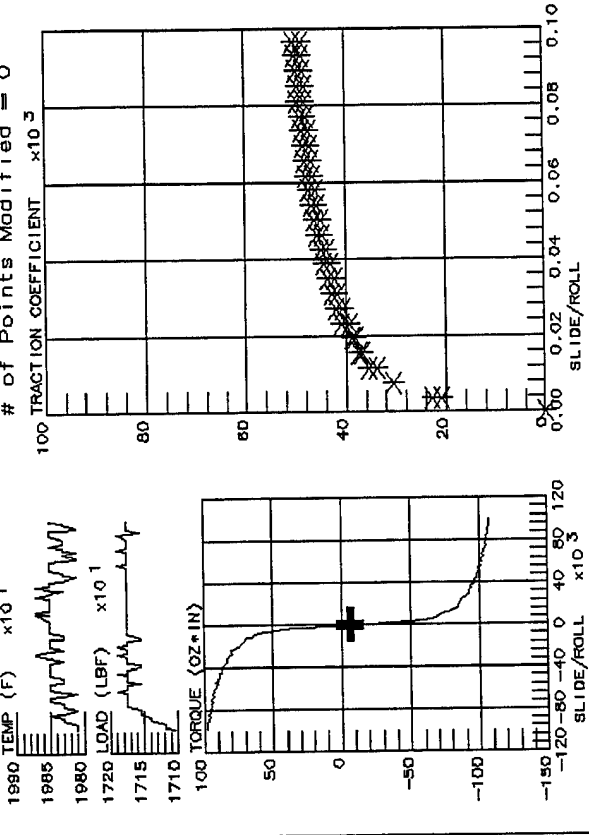
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #164
200F 21LBF 1260RPM 23 FILE: bq20012



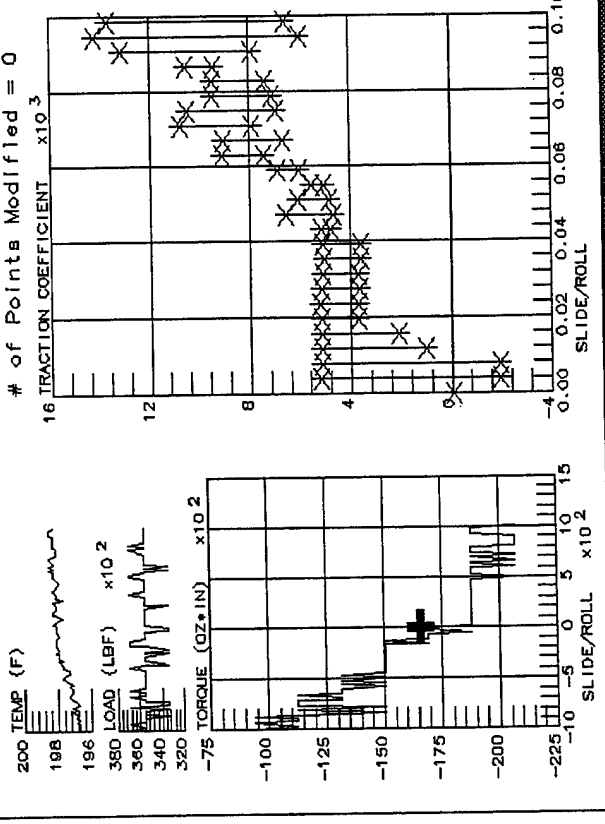
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #165
200F 72LBF 1260RPM 24 FILE: bq20012



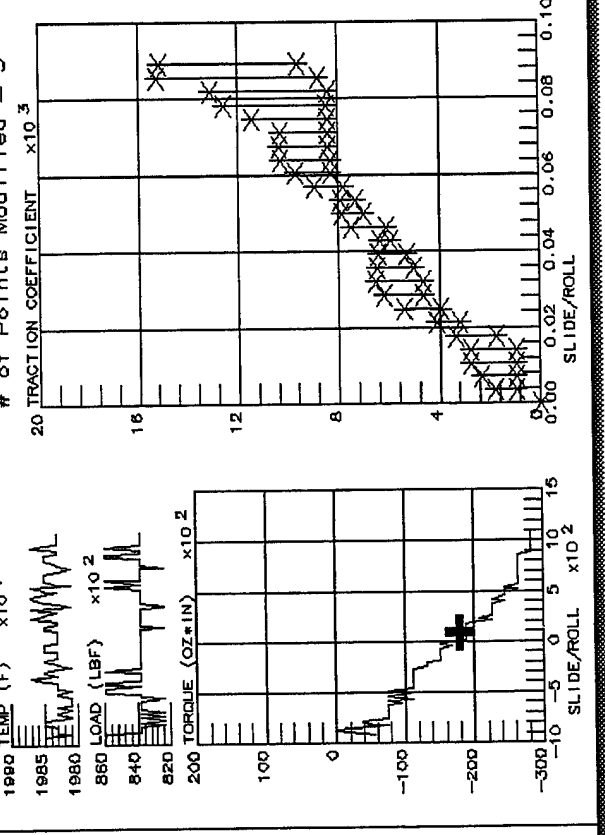
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #168
200F 172LBF 1260RPM 25 FILE: bq20012



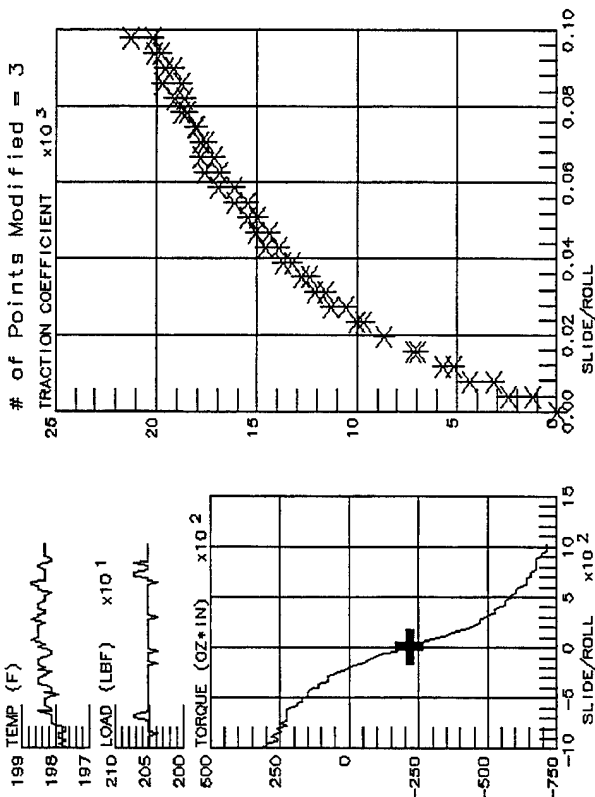
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #167
200F 31LBF 2559RPM 26 FILE: bq20012



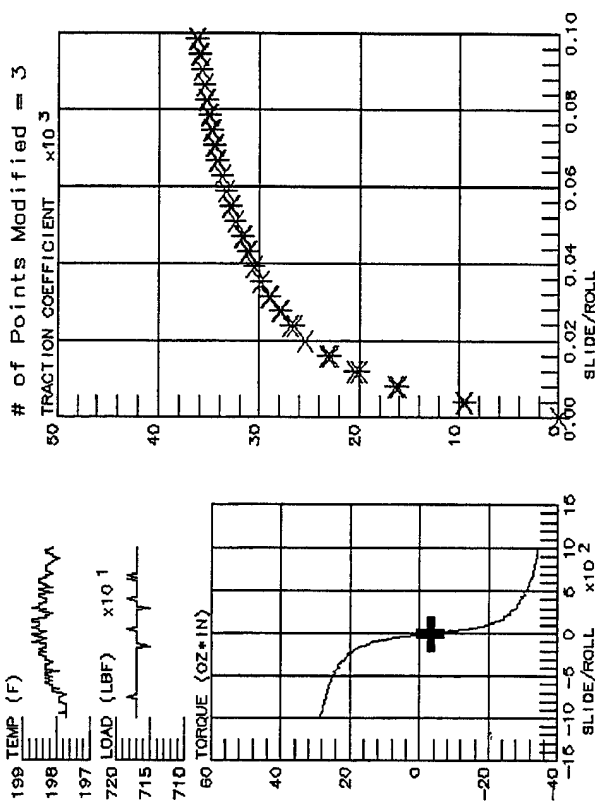
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #168
200F 8LBF 2559RPM 27 FILE: bq20012



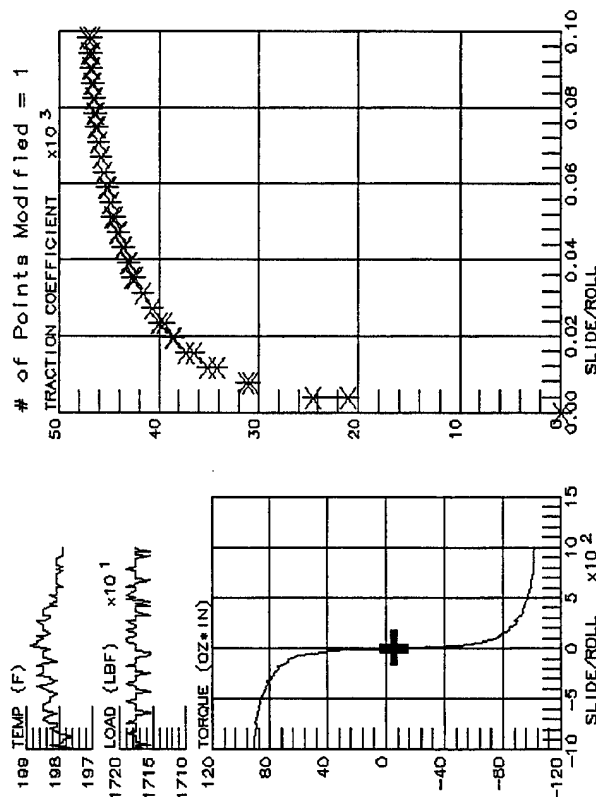
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #189
200F 21LBF 2669RPM 28 FILE: bq20012



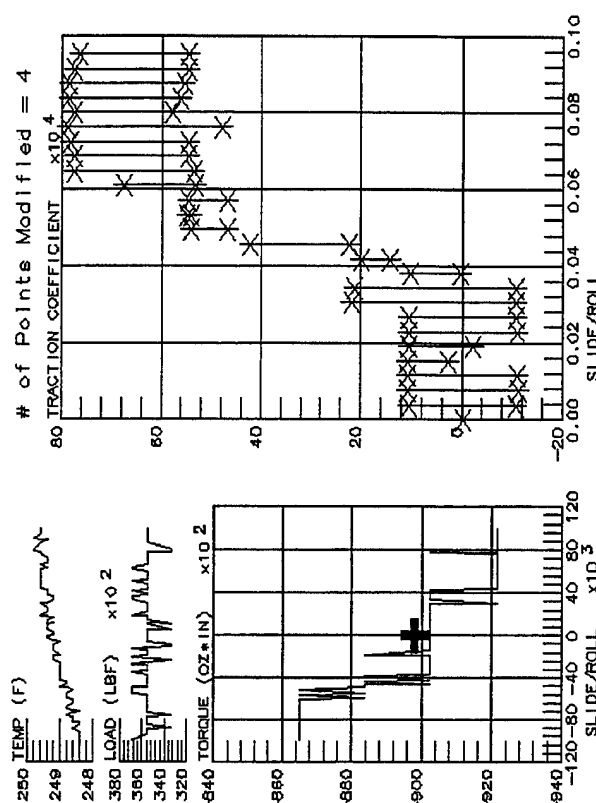
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #170
200F 72LBF 2669RPM 29 FILE: bq20012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #171
200F 172LBF 2669RPM 30 FILE: bq20012

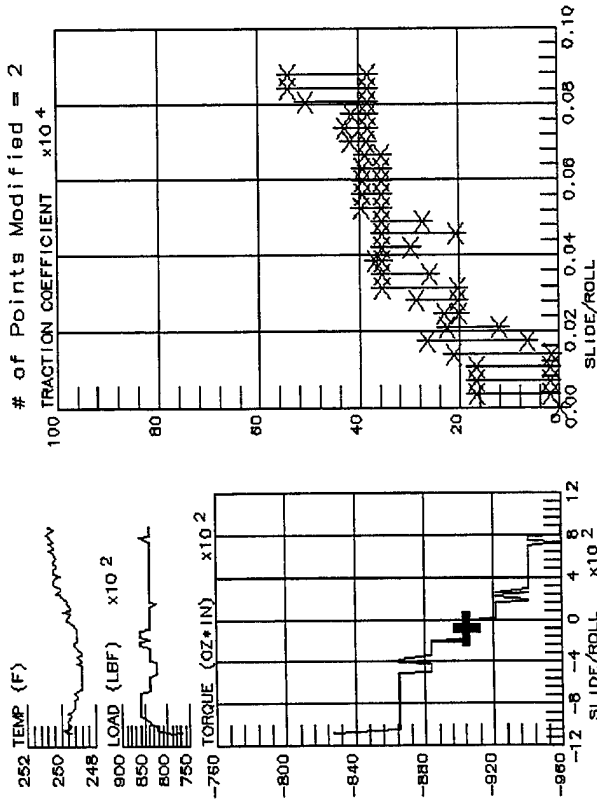


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #172
250F 3LBF 5080RPM 1 FILE: bq250h2



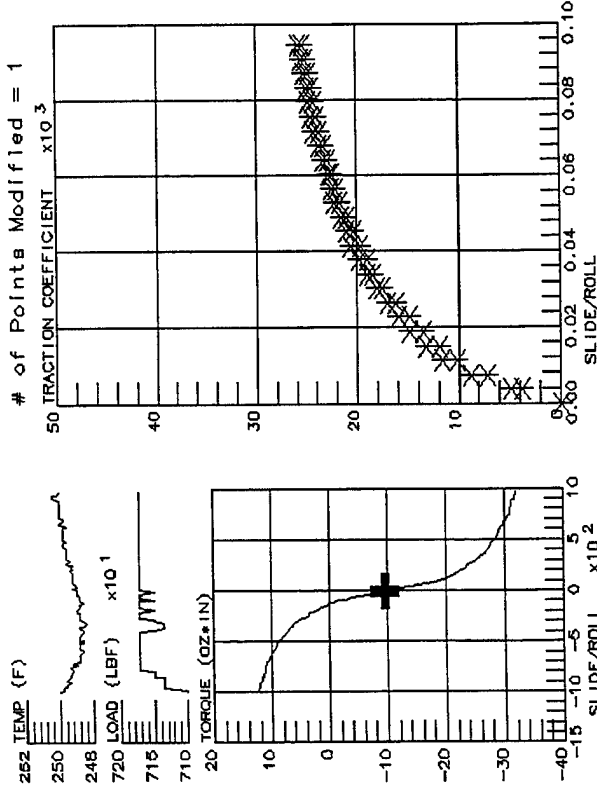
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #173
250F 8LBF 5080RPM 2 FILE: bq250h2

of Points Modified = 2



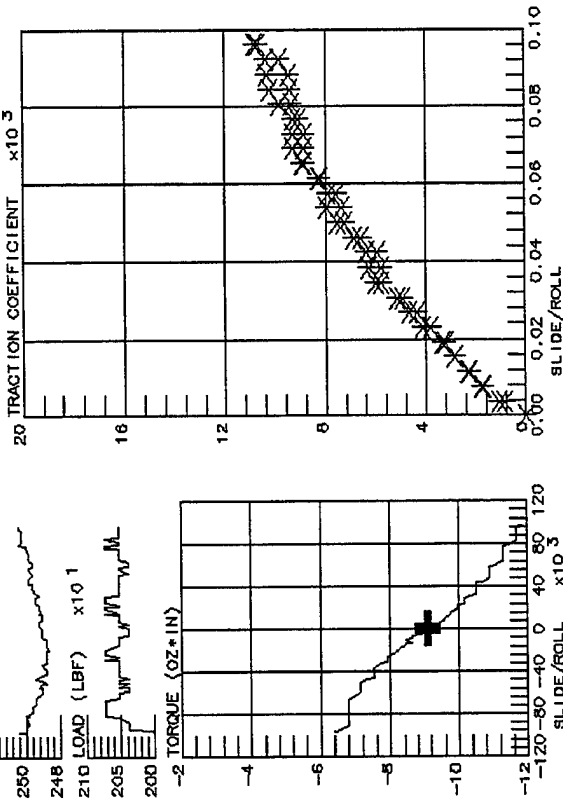
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #175
250F 72LBF 5080RPM 4 FILE: bq250h2

of Points Modified = 1



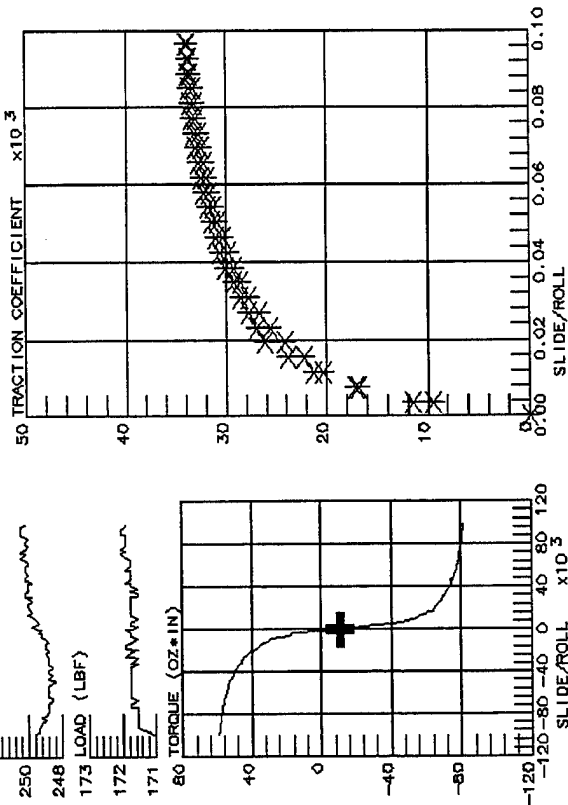
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #174
250F 21LBF 5080RPM 3 FILE: bq250h2

of Points Modified = 1

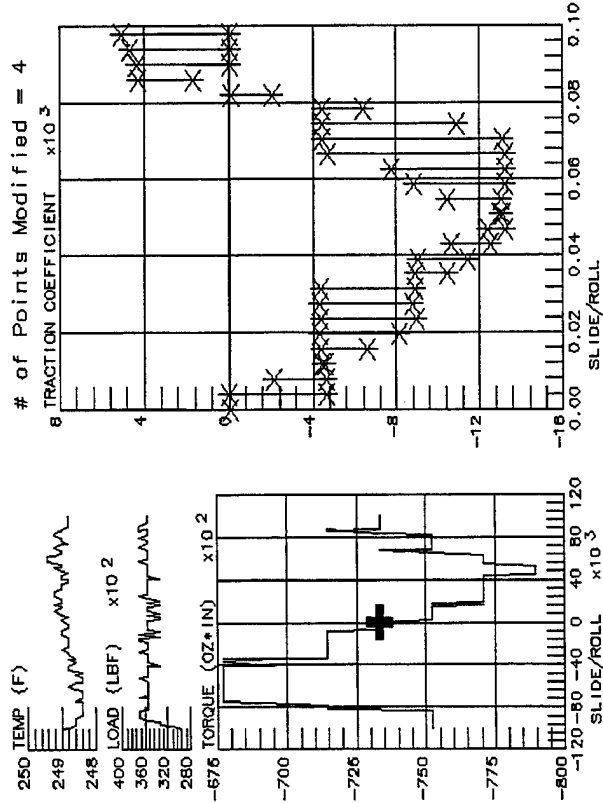


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #176
250F 172LBF 5080RPM 5 FILE: bq250h2

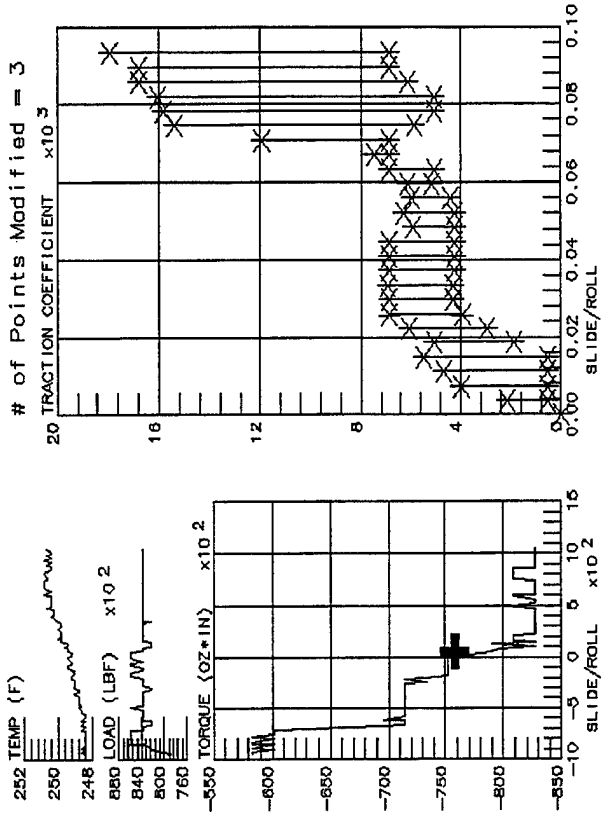
of Points Modified = 4



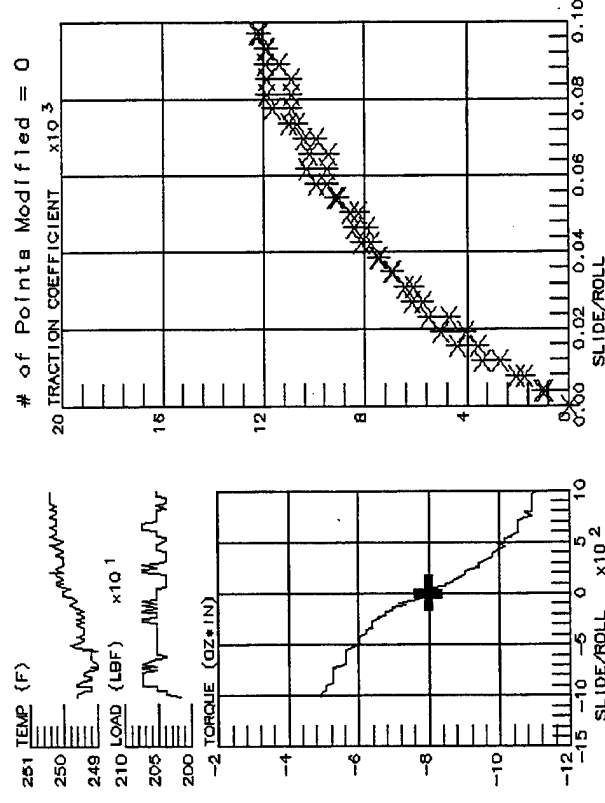
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #177
250F 31LBF 7639RPM 6 FILE: bq250h2



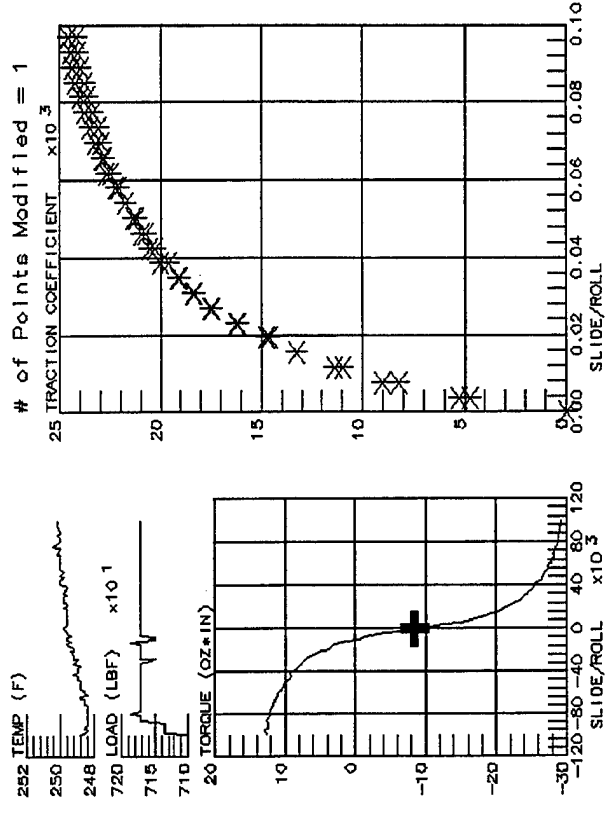
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #178
250F 8LBF 7639RPM 7 FILE: bq250h2



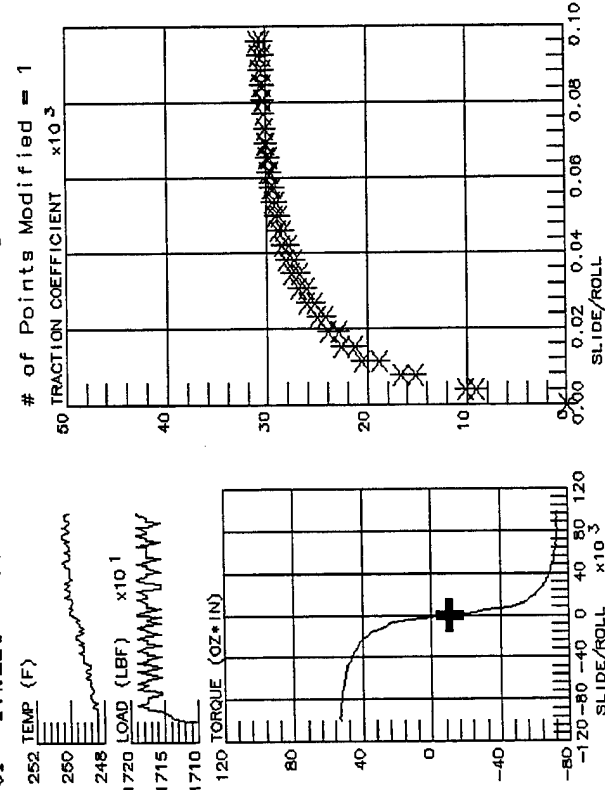
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #179
250F 21LBF 7639RPM 8 FILE: bq250h2



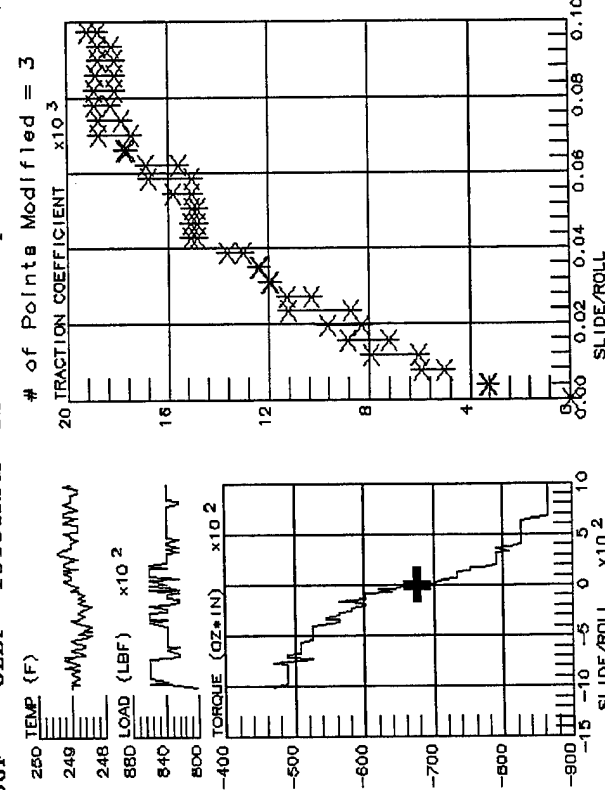
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #180
250F 72LBF 7639RPM 9 FILE: bq250h2



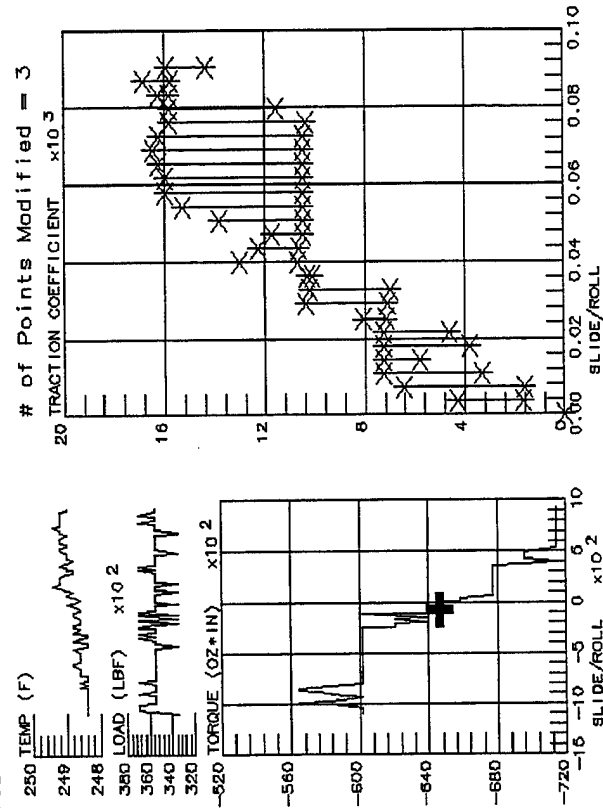
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #181
250F 172LBF 7639RPM 10 FILE: bq250h2



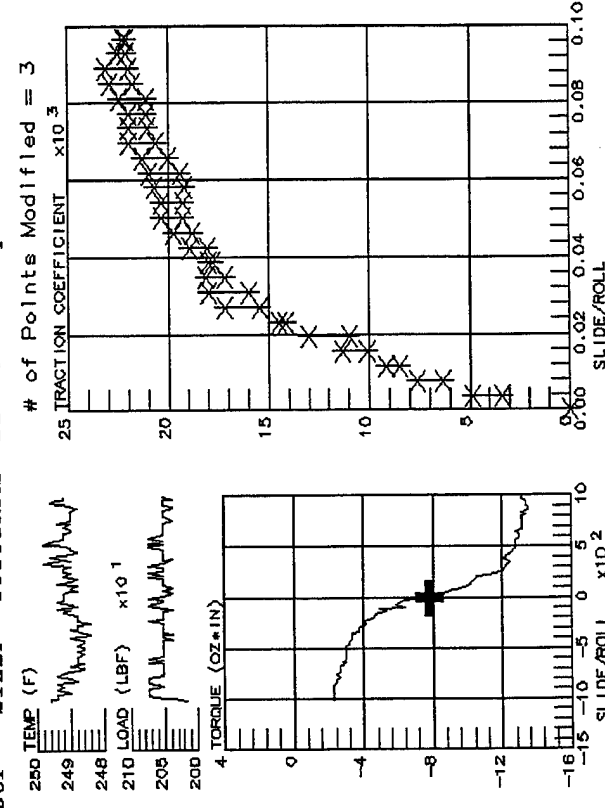
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #183
250F 8LBF 1019RPM 12 FILE: bq250h2



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #182
250F 3LBF 1019RPM 11 FILE: bq250h2



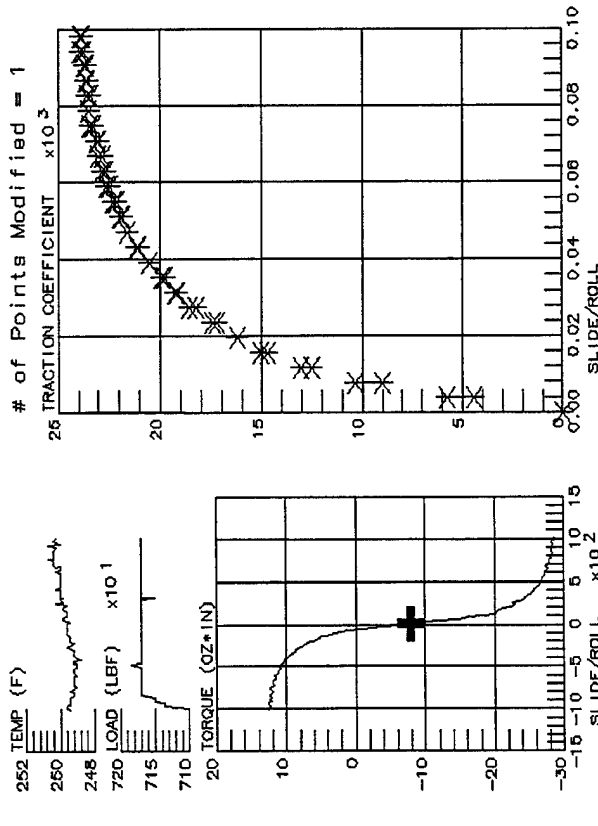
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #184
250F 21LBF 1019RPM 13 FILE: bq250h2



SHIJIANG HAIKOSTRI

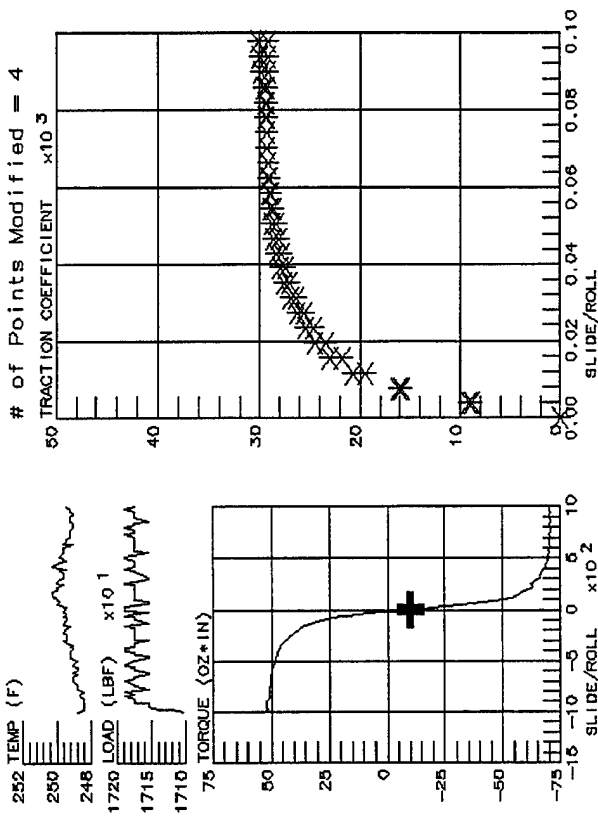
81-288 AplezonC+5%Bardhal (VacKote) #185
72LBF 10198RPM 14 FILE: bq250h2

of Points Modified = 1



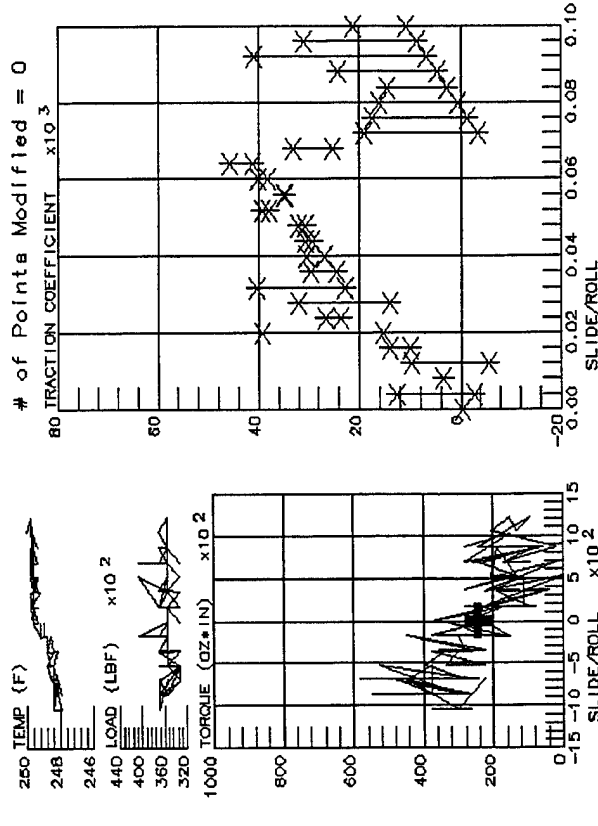
BBQ 81-288 AplezonC+5%Bardhal(VacKote) #188
1250F 1019RPM 15 FILE: bq250h2
172LBF

of Points Modified = 4



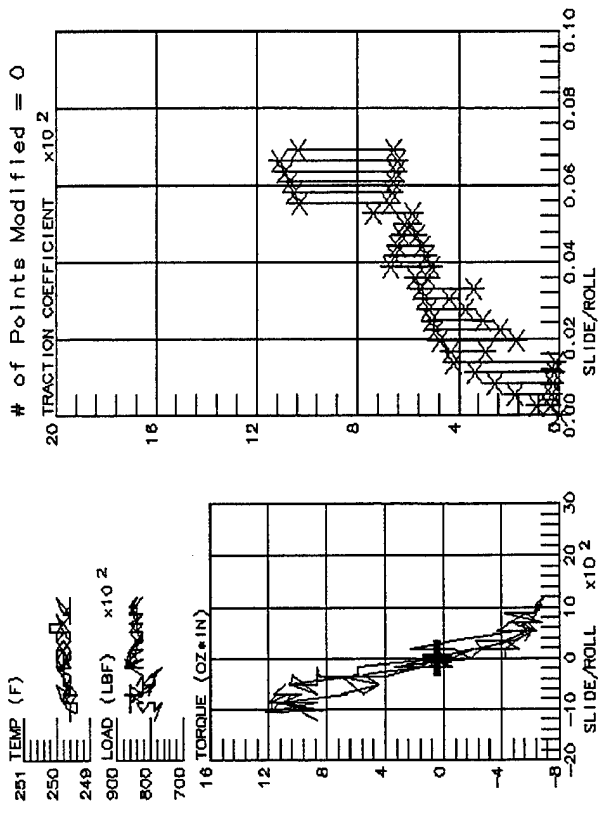
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #187
250F 3LBF 76RPM 1 FILE: bq25012

of Points Modified = 0



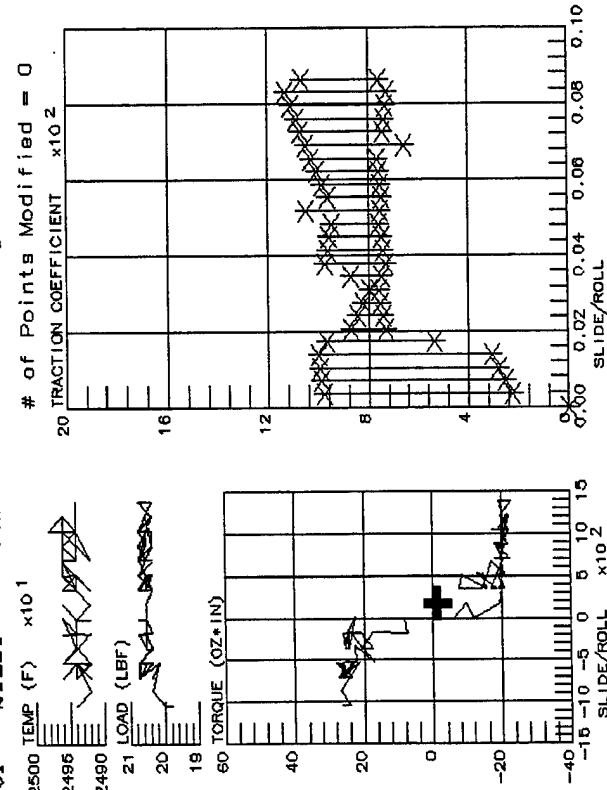
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #188
250F 8LBF 76RPM 2 FILE: bq25012

of Points Modified = 0

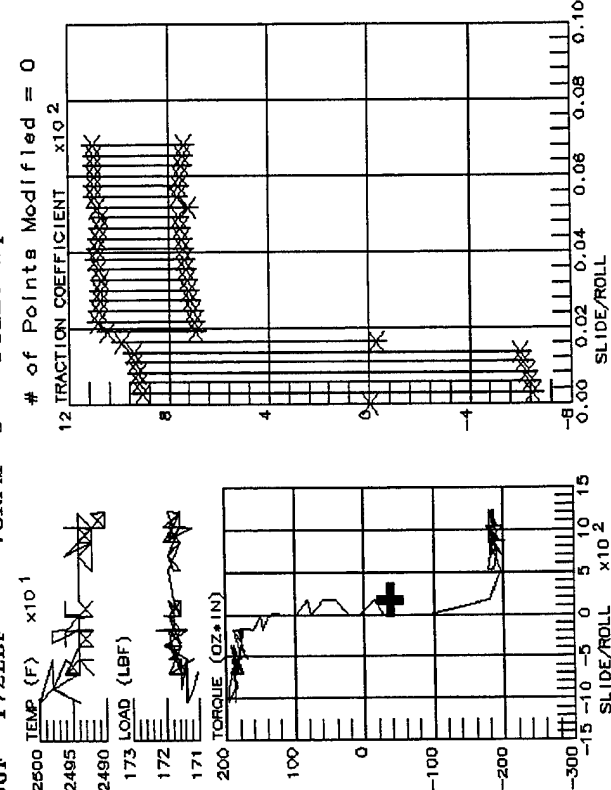


TRACTION MODELING

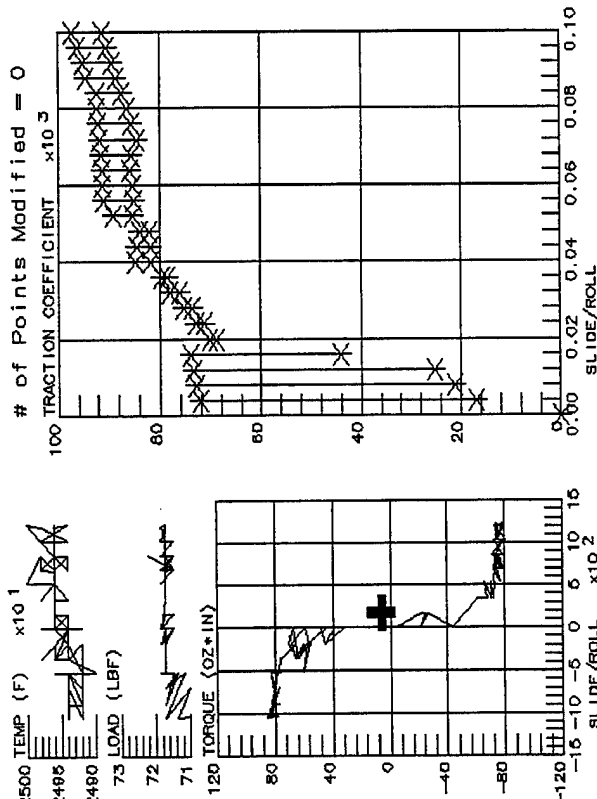
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #189
250F 21LBF 76RPM 3 FILE: bq25012



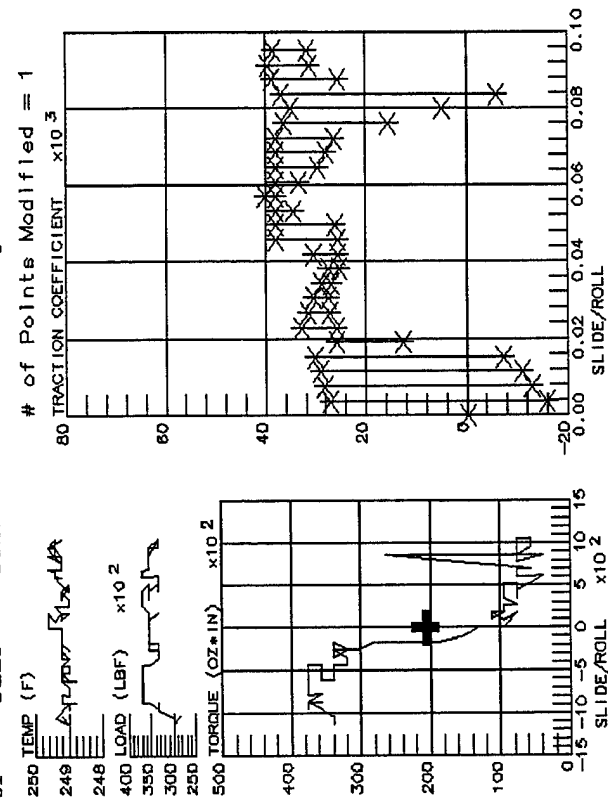
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #191
250F 172LBF 76RPM 5 FILE: bq25012



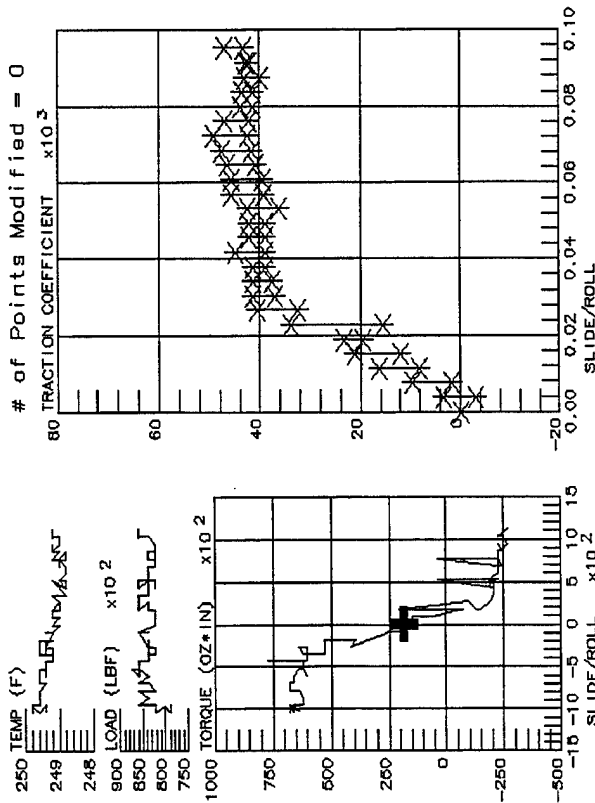
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #190
250F 72LBF 76RPM 4 FILE: bq25012



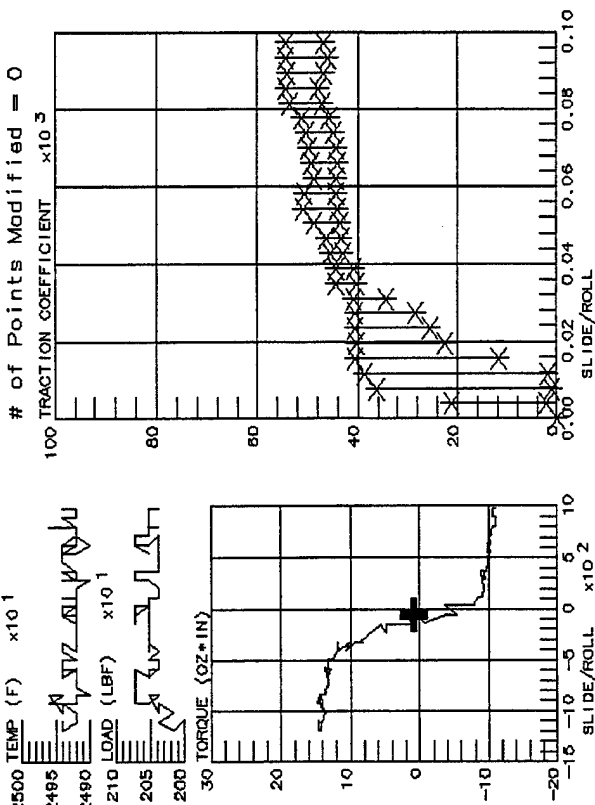
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #192
250F 3LBF 152RPM 6 FILE: bq25012



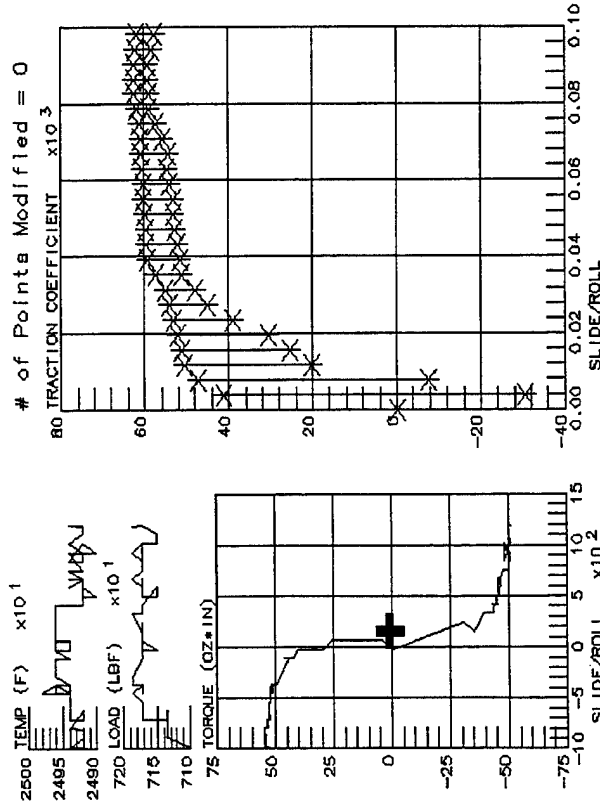
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #193
250F 8LBF 152RPM 7 FILE: bq25012



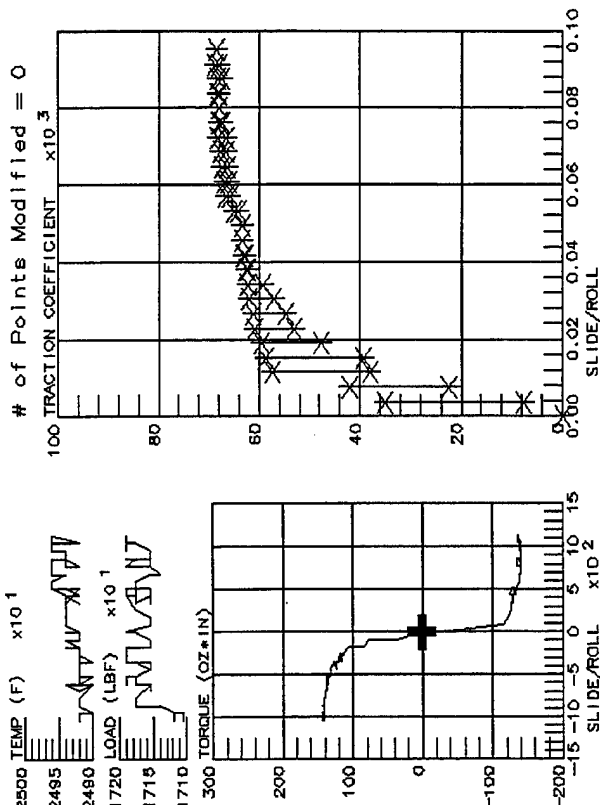
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #194
250F 21LBF 152RPM 8 FILE: bq25012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #195
250F 72LBF 152RPM 9 FILE: bq25012

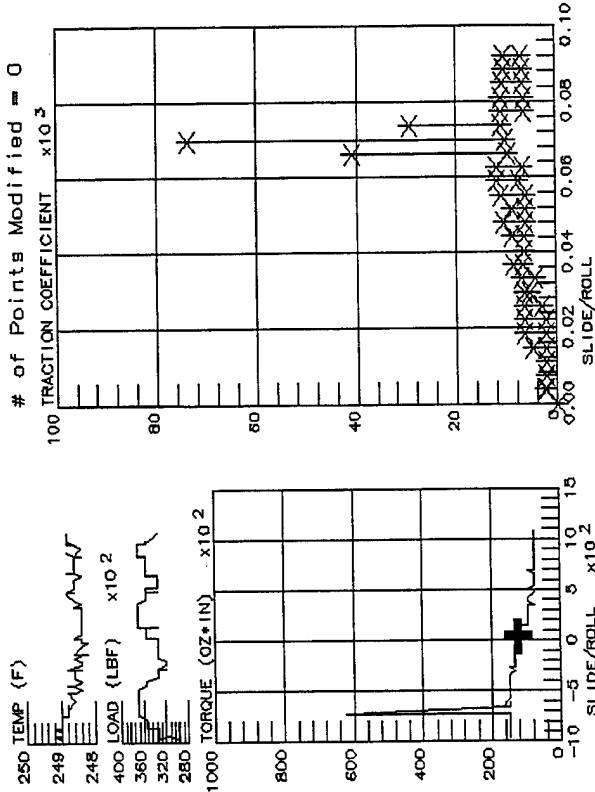


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #196
250F 172LBF 152RPM 10 FILE: bq25012



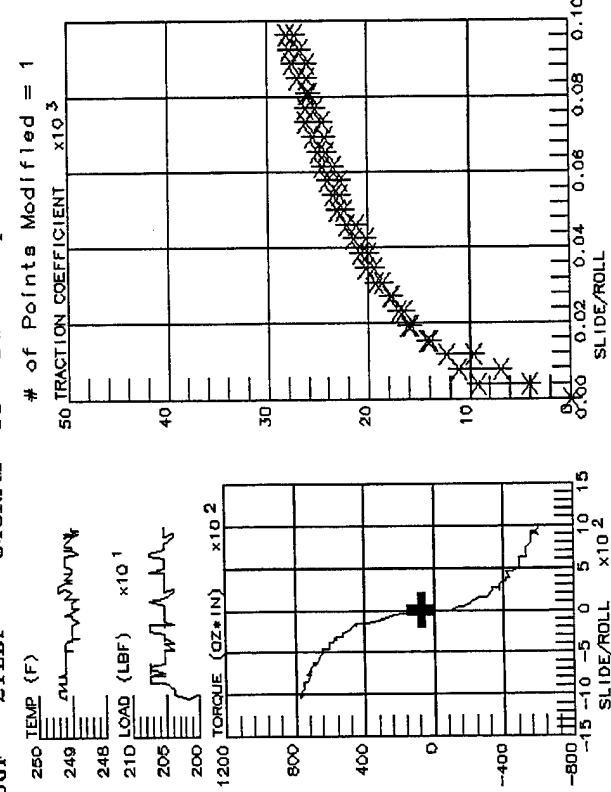
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #197
250F 3LBF 343RPM 11 FILE: bq25012

of Points Modified = 0



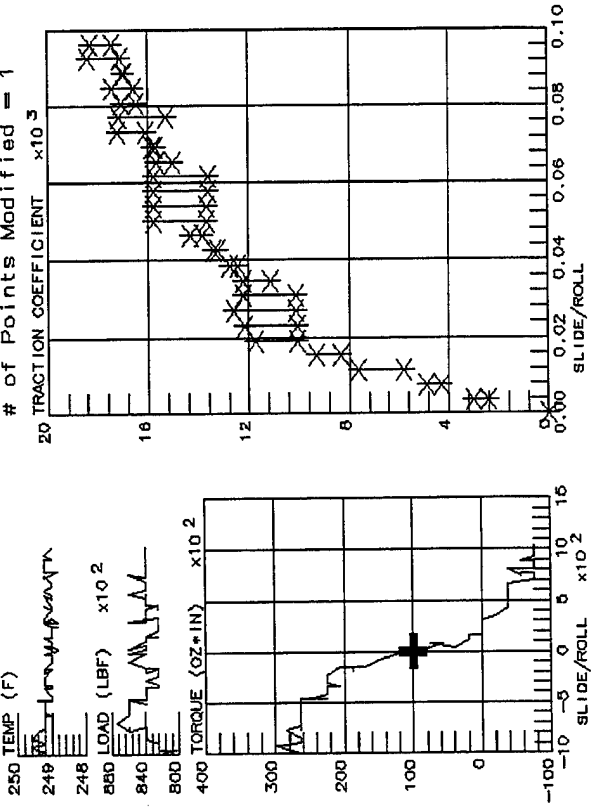
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #199
250F 21LBF 343RPM 13 FILE: bq25012

of Points Modified = 1



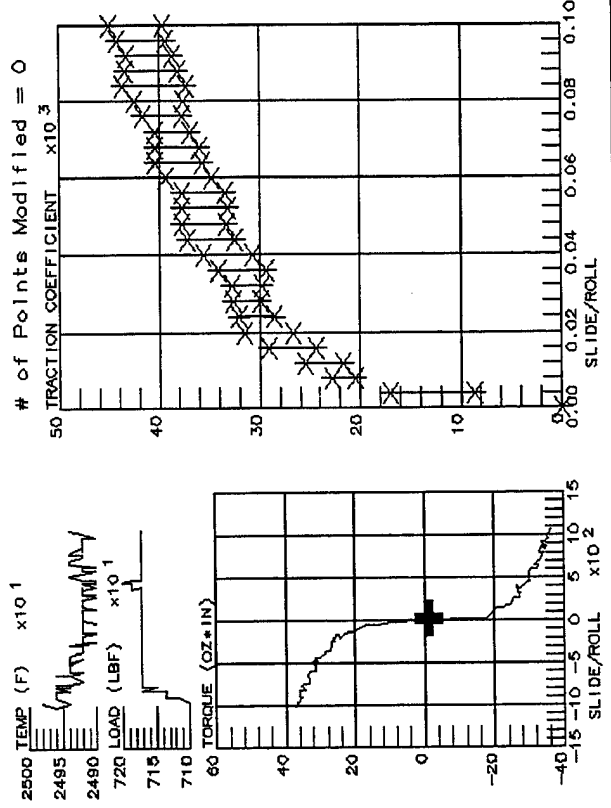
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #198
250F 8LBF 343RPM 12 FILE: bq25012

of Points Modified = 1

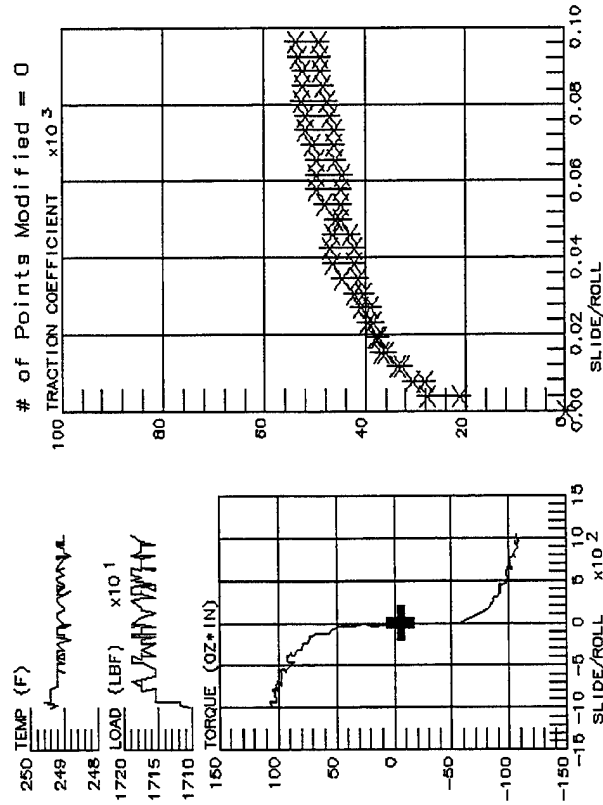


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #200
250F 72LBF 343RPM 14 FILE: bq25012

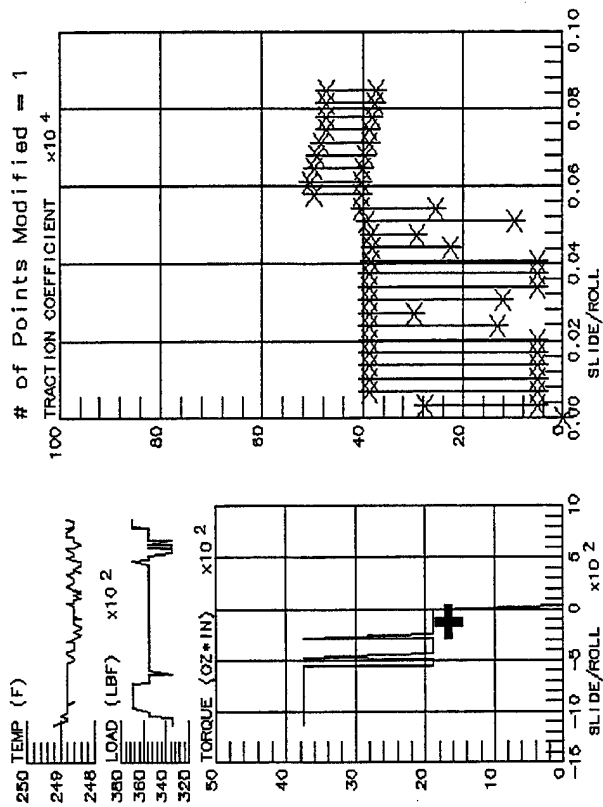
of Points Modified = 0



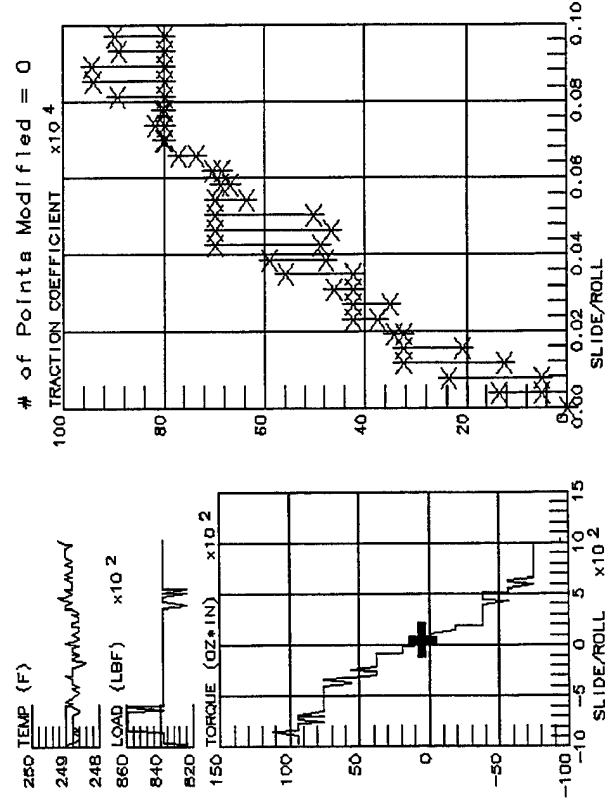
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #201
250F 172LBF 343RPM 15 FILE: bq25012



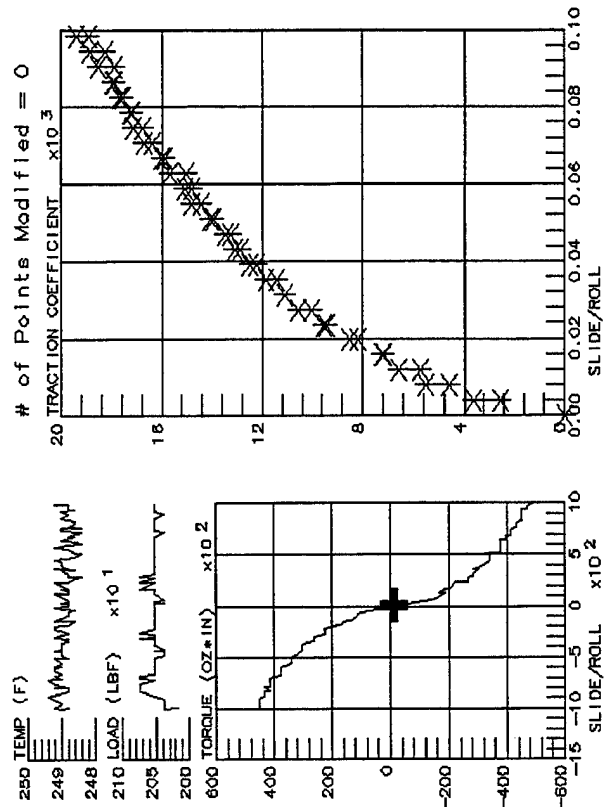
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #202
250F 3LBF 650RPM 16 FILE: bq25012



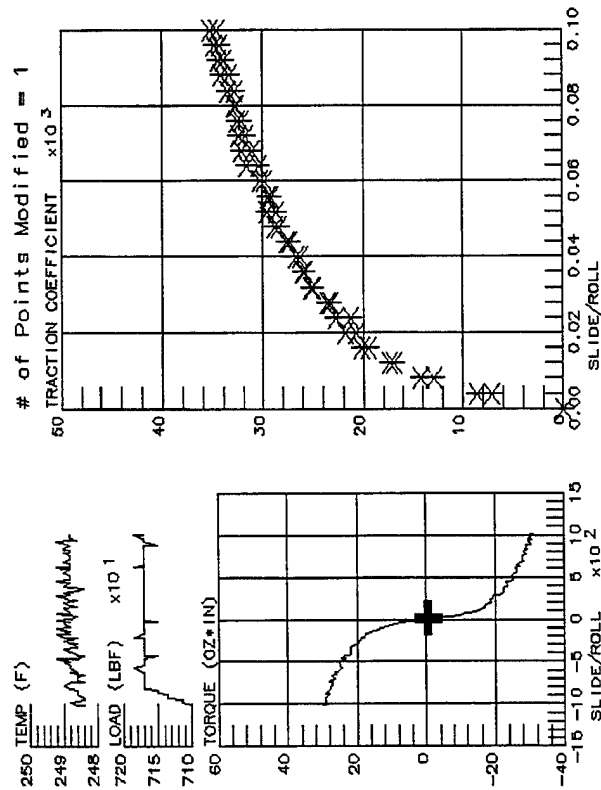
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #203
250F 8LBF 650RPM 17 FILE: bq25012



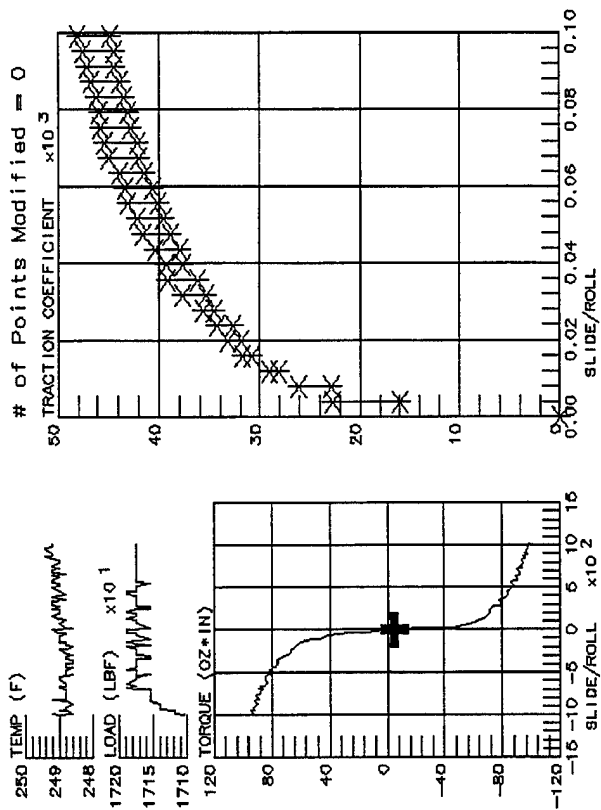
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #204
250F 21LBF 650RPM 18 FILE: bq25012



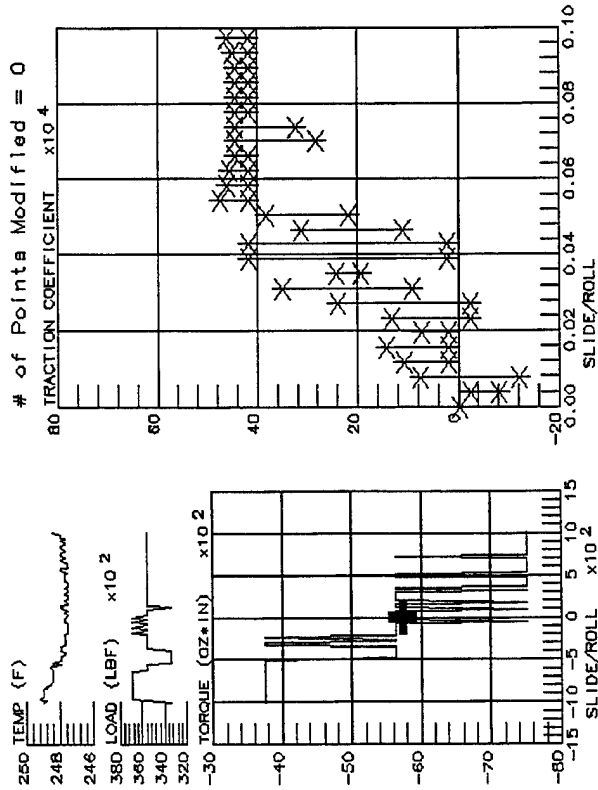
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #205
250F 72LBF 650RPM 19 FILE: bq25012



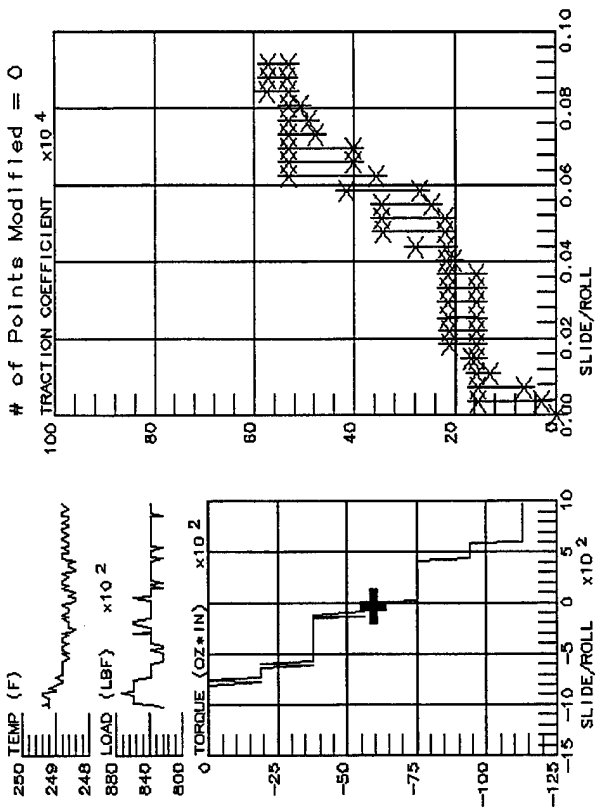
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #208
250F 172LBF 660RPM 20 FILE: bq25012



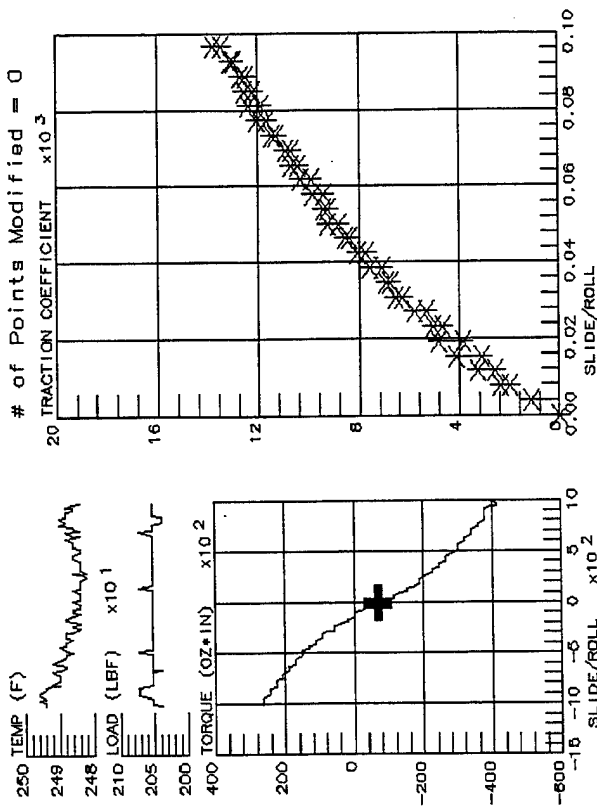
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #207
250F 3LBF 1260RPM 21 FILE: bq25012



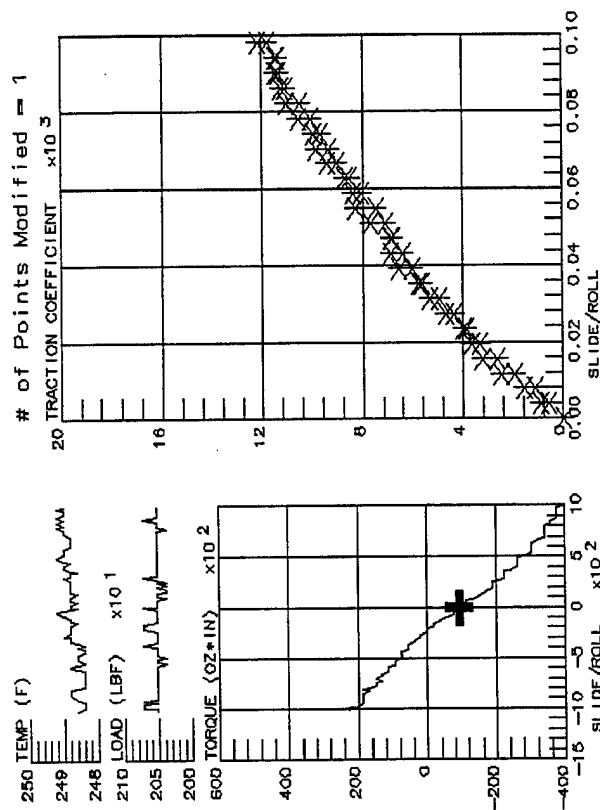
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #208
250F 6LBF 1260RPM 22 FILE: bq25012



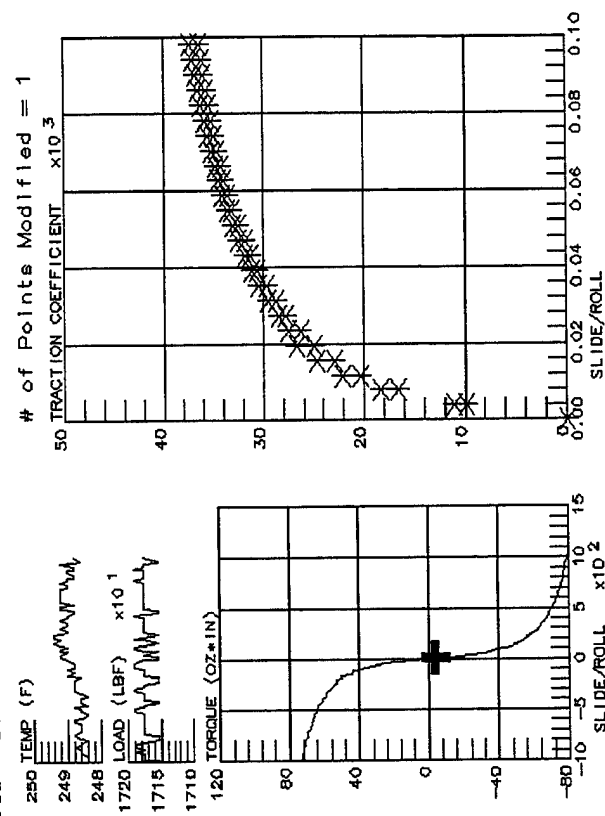
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #209
250F 21LBF 1260RPM 23 FILE: bq25012



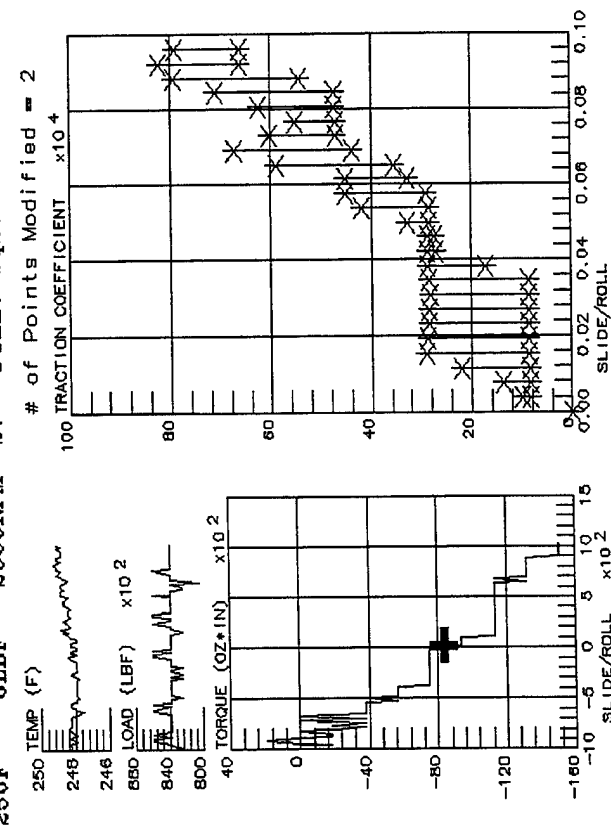
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #214
250F 21LBF 2559RPM 28 FILE: bq25012



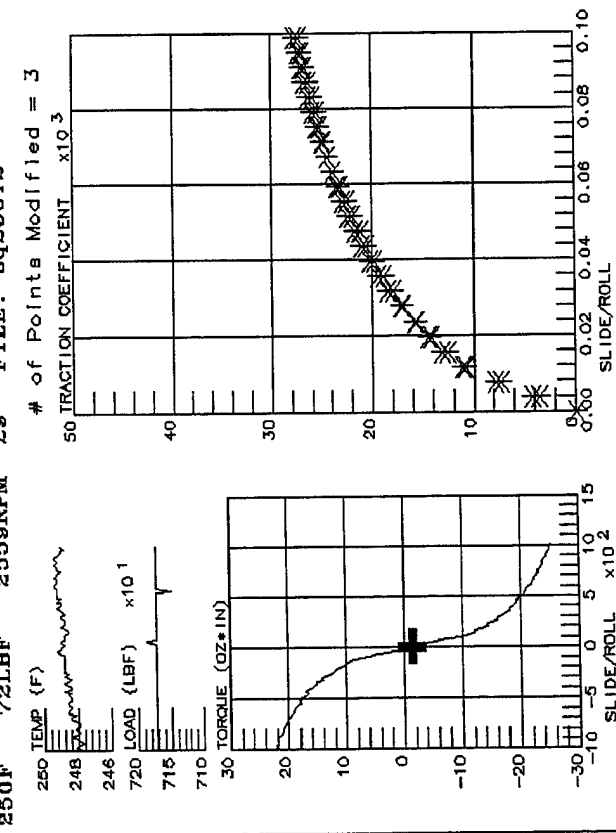
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #216
250F 172LBF 2559RPM 30 FILE: bq25012



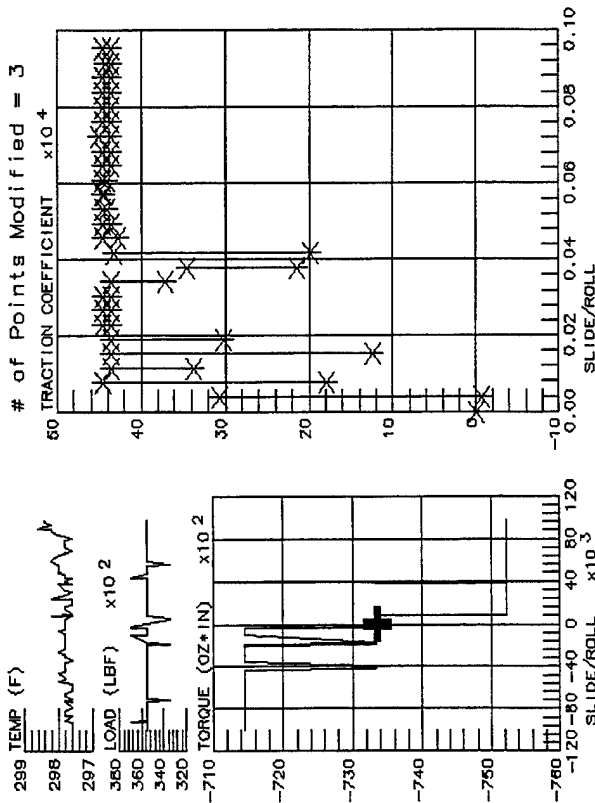
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #213
250F 8LBF 2559RPM 27 FILE: bq25012



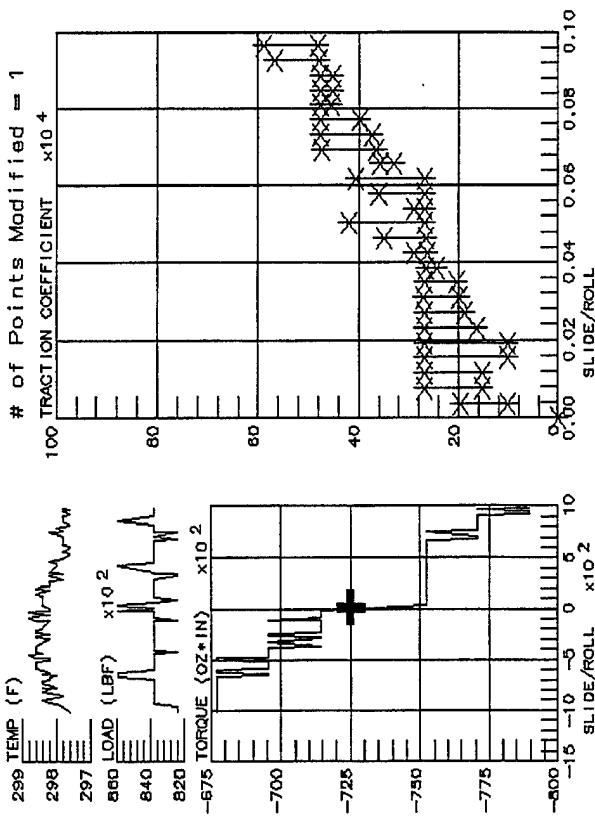
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #215
250F 72LBF 2559RPM 29 FILE: bq25012



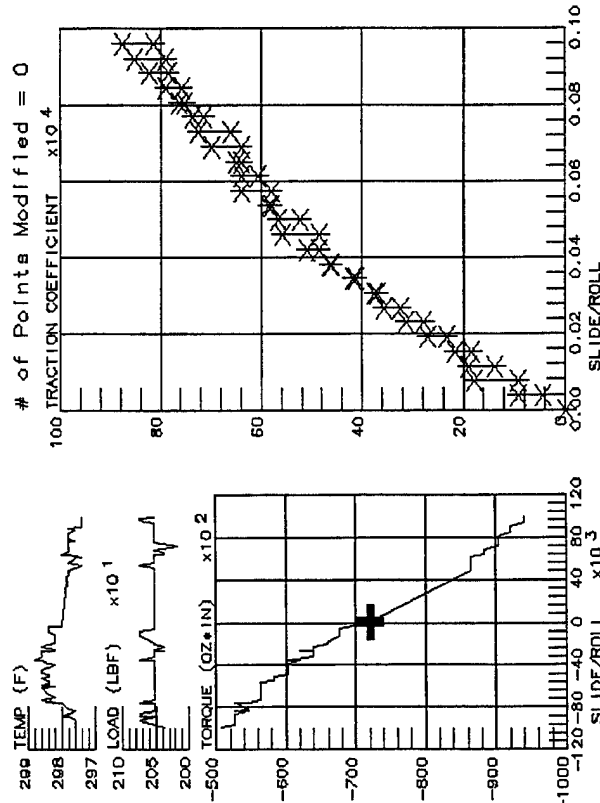
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #217
300F 3LBF 5080RPM 1 FILE: bq300h2



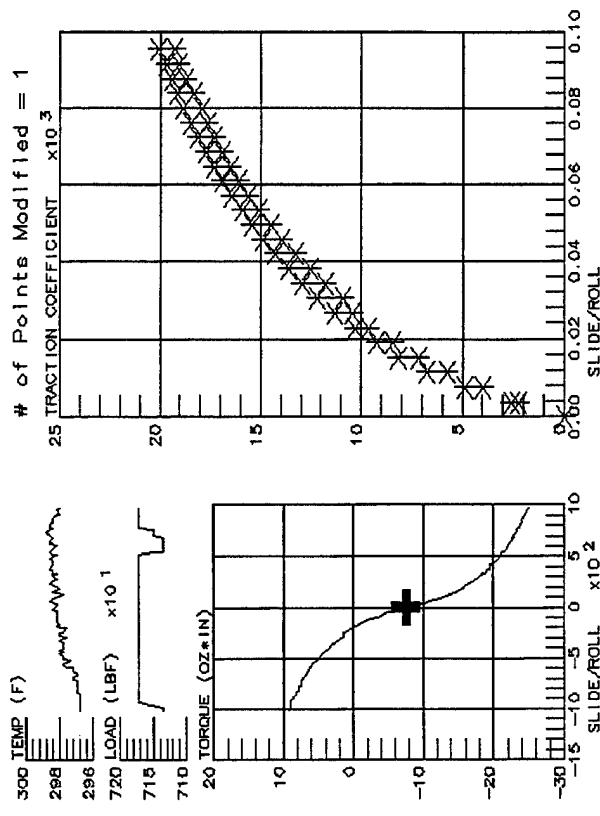
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #218
300F 8LBF 5080RPM 2 FILE: bq300h2



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #219
300F 21LBF 5080RPM 3 FILE: bq300h2

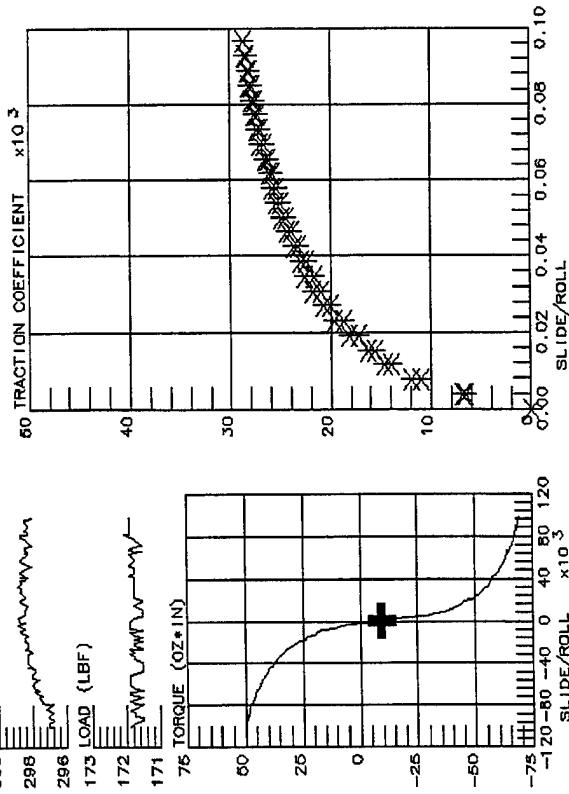


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #220
300F 72LBF 5080RPM 4 FILE: bq300h2



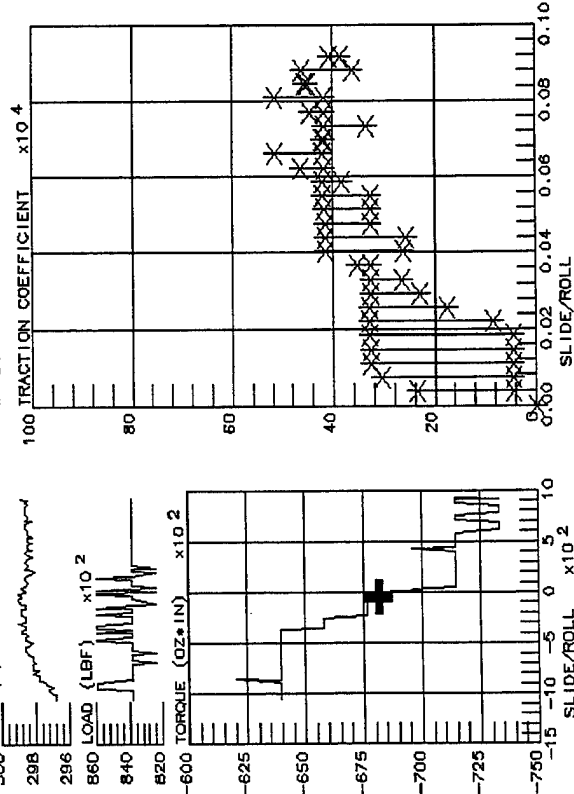
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #221
300F 172LBF 5080RPM 5 FILE: bq300h2

of Points Modified = 1



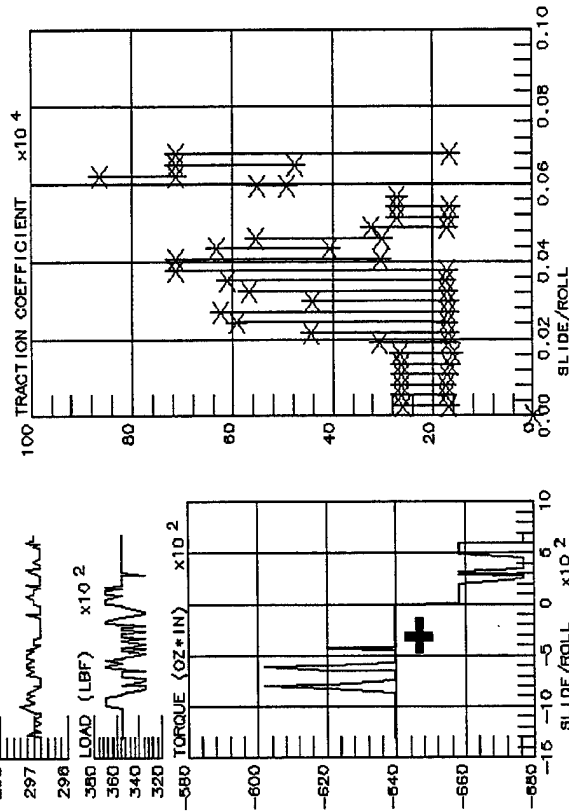
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #223
300F 8LBF 7639RPM 7 FILE: bq300h2

of Points Modified = 2



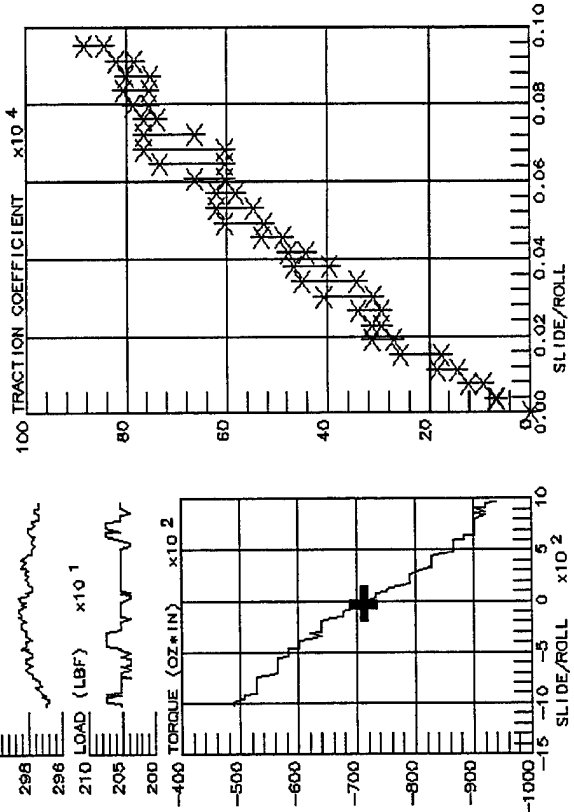
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #222
300F 3LBF 7639RPM 8 FILE: bq300h2

of Points Modified = 2

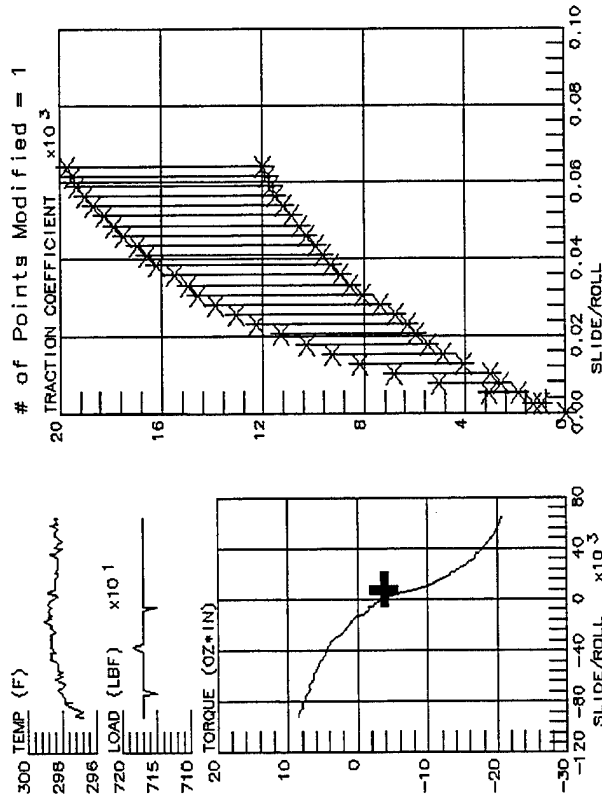


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #224
300F 21LBF 7639RPM 8 FILE: bq300h2

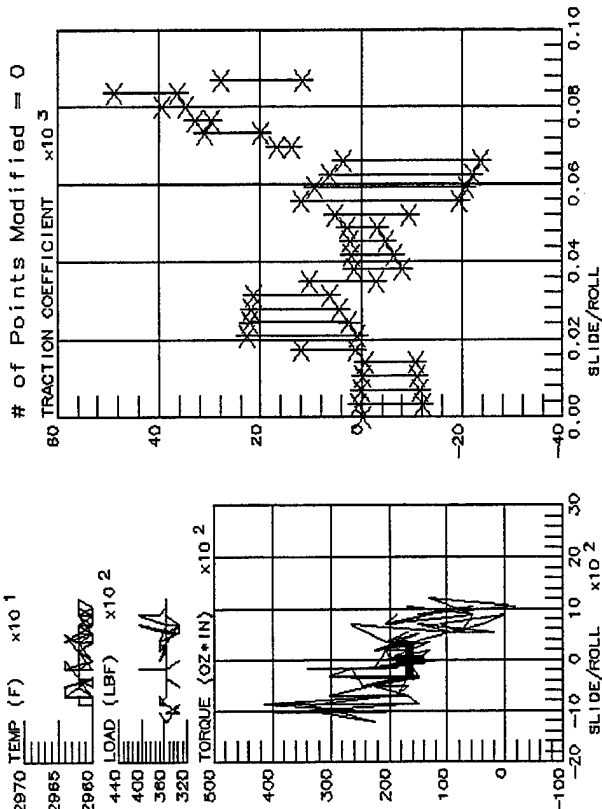
of Points Modified = 2



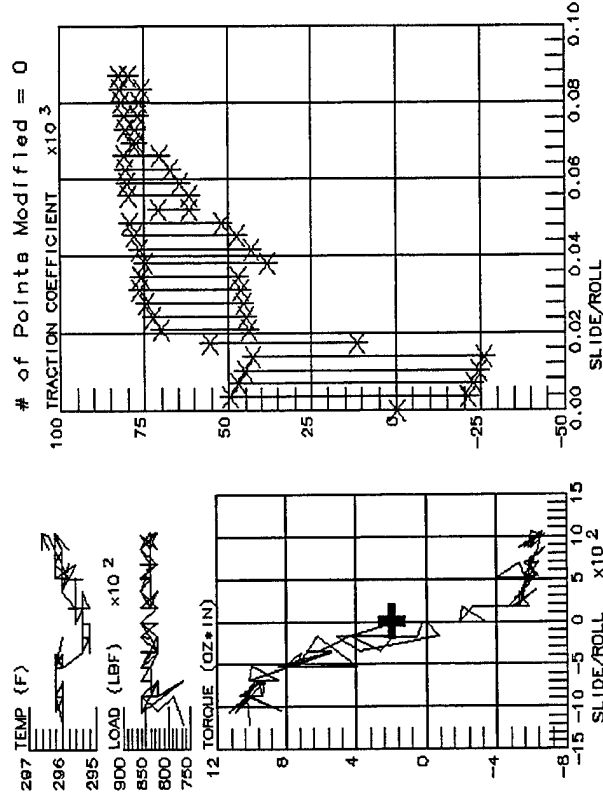
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #226
300F 72LBF 7639RPM 9 FILE: bq300h2



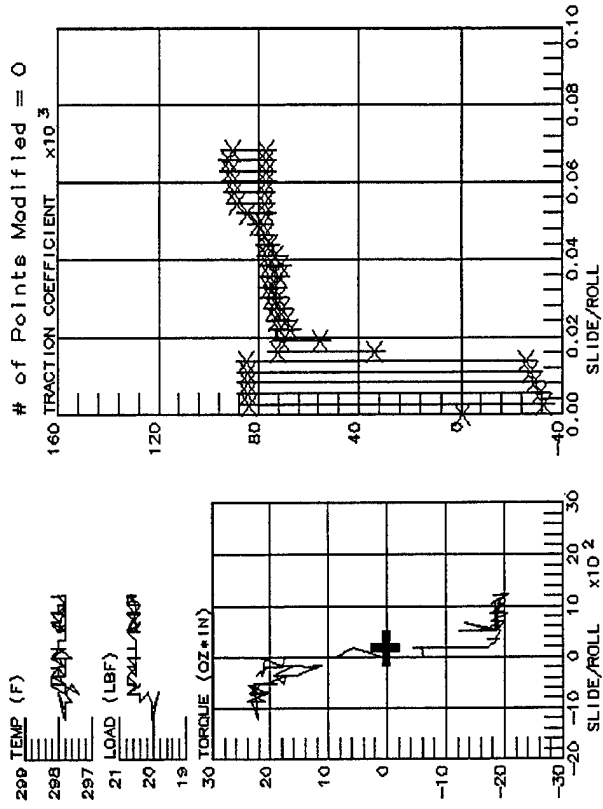
BQ 81-288 ApiezonC+5%Bardhal (VacKote) #228
300F 3LBF 76RPM 1 FILE: bq300l2



BQ 81-288 ApiezonC+5%Bardhal (VacKote) #227
300F 8LBF 76RPM 2 FILE: bq300l2

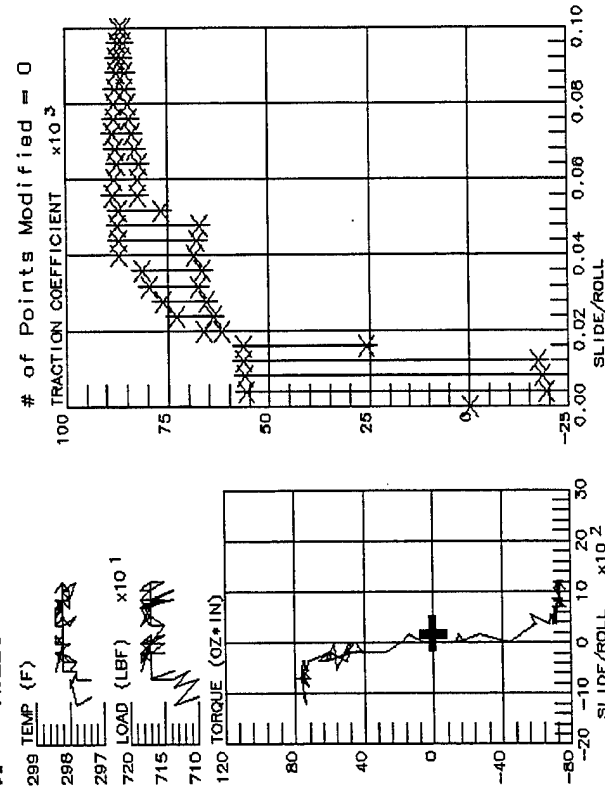


BQ 81-288 ApiezonC+5%Bardhal (VacKote) #228
300F 21LBF 76RPM 3 FILE: bq300l2

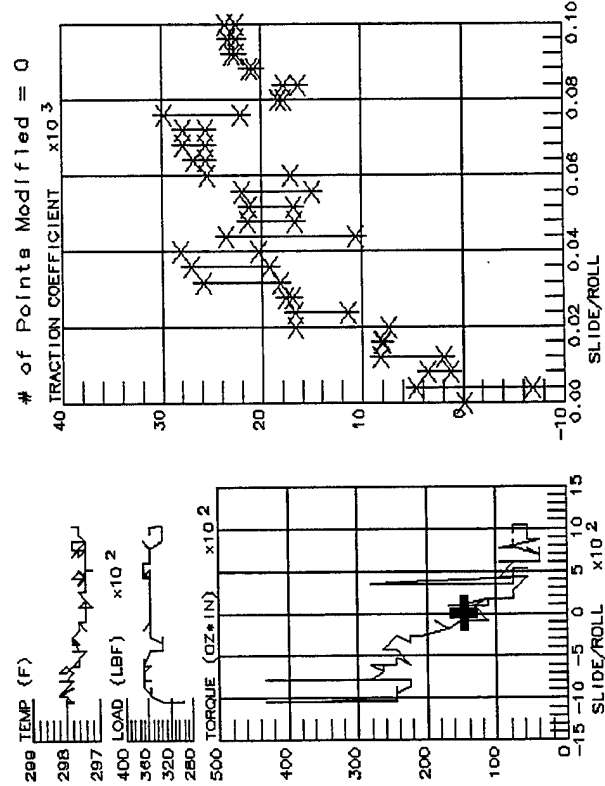


TRACTION MONITORING

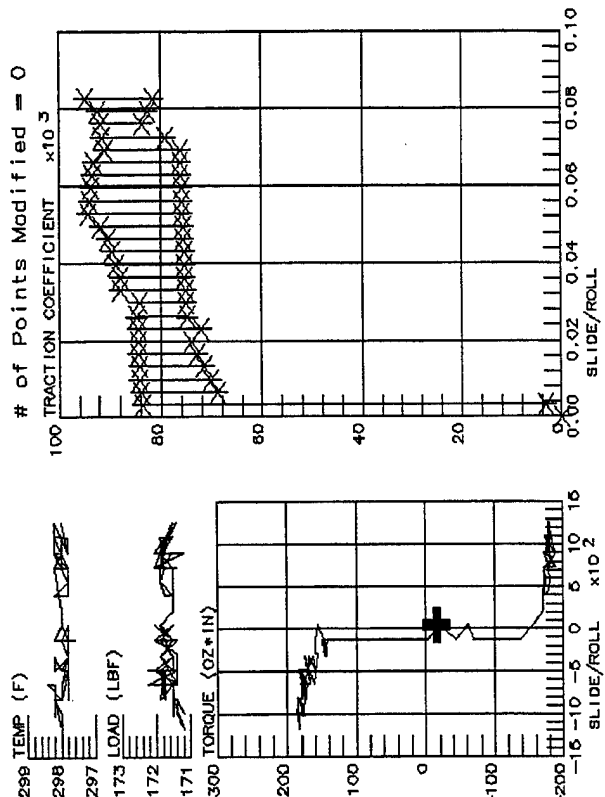
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #229
300F 72LBF 76RPM 4 FILE: bq30012



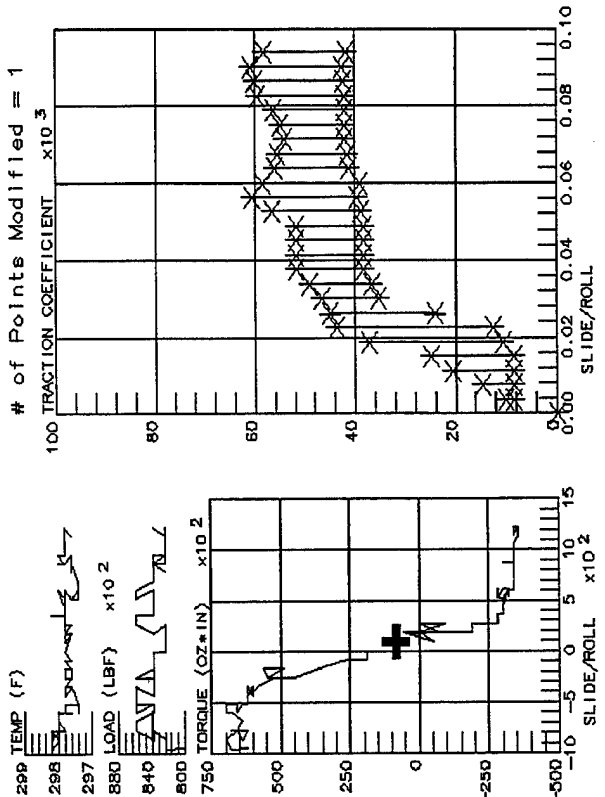
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #231
300F 3LBF 152RPM 6 FILE: bq30012



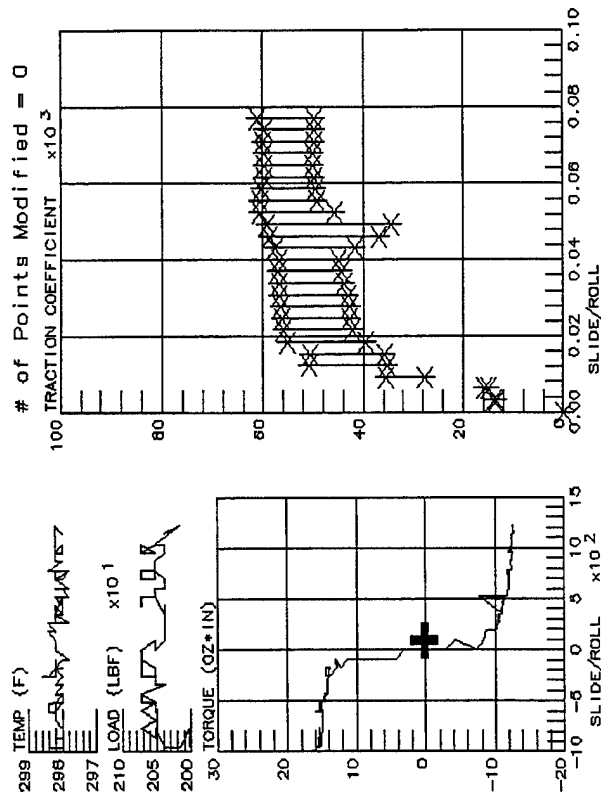
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #230
300F 172LBF 76RPM 5 FILE: bq30012



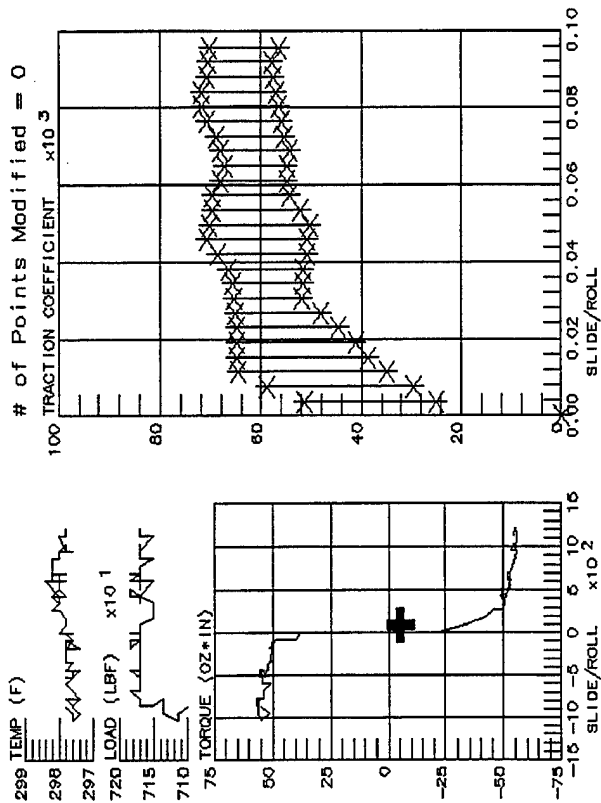
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #232
300F 8LBF 152RPM 7 FILE: bq30012



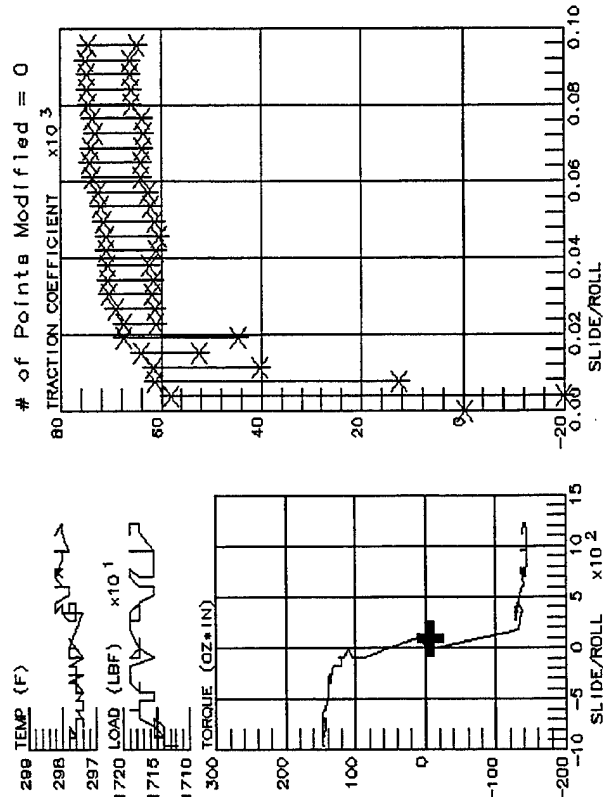
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #233
300F 21LBF 152RPM 8 FILE: bq30012



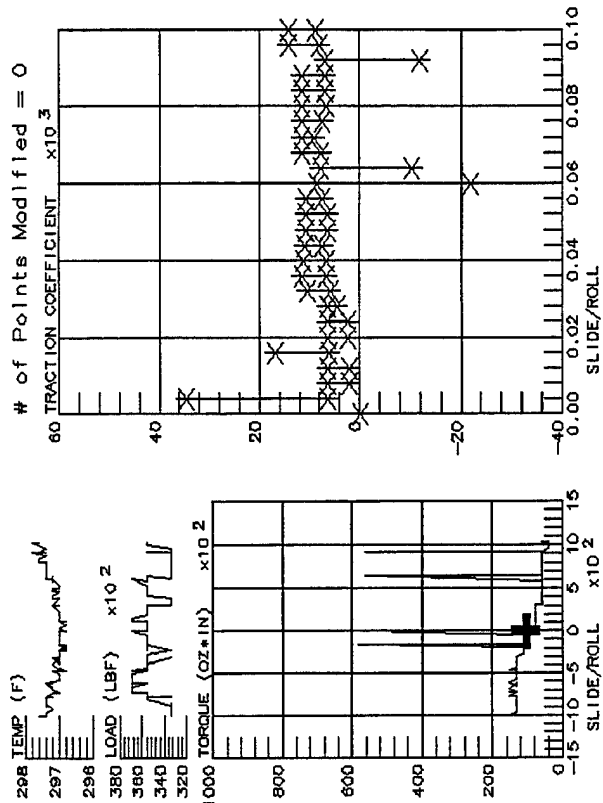
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #234
300F 72LBF 152RPM 9 FILE: bq30012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #235
300F 172LBF 152RPM 10 FILE: bq30012

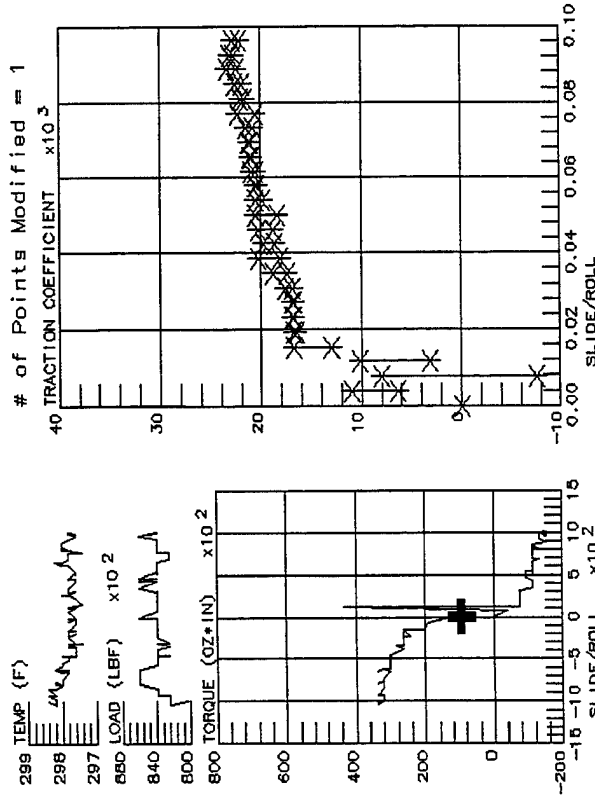


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #236
300F 3LBF 343RPM 11 FILE: bq30012



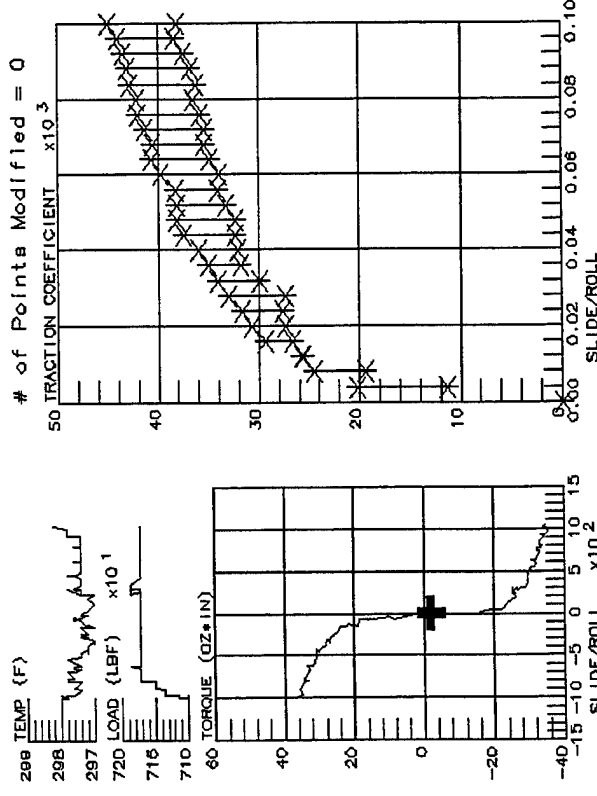
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #237
300F 8LBF 343RPM 12 FILE: bq30012

of Points Modified = 1



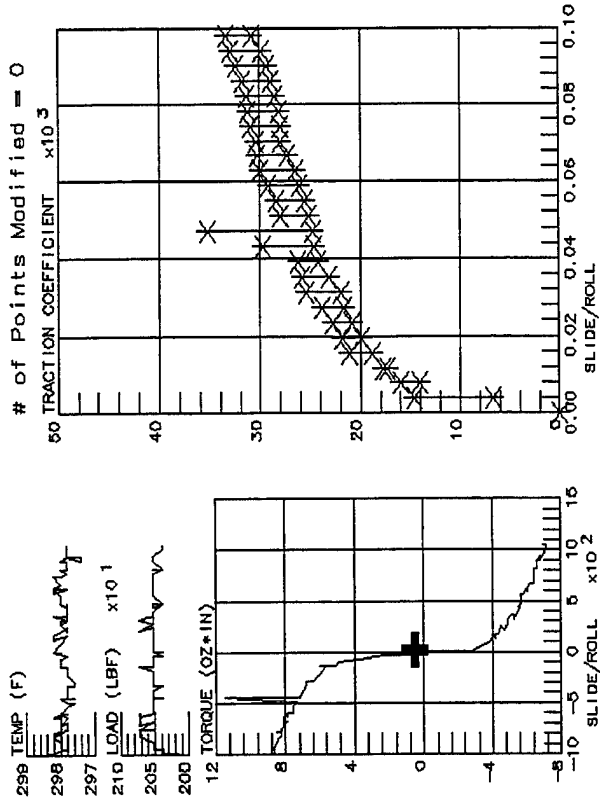
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #239
300F 72LBF 343RPM 14 FILE: bq30012

of Points Modified = 0



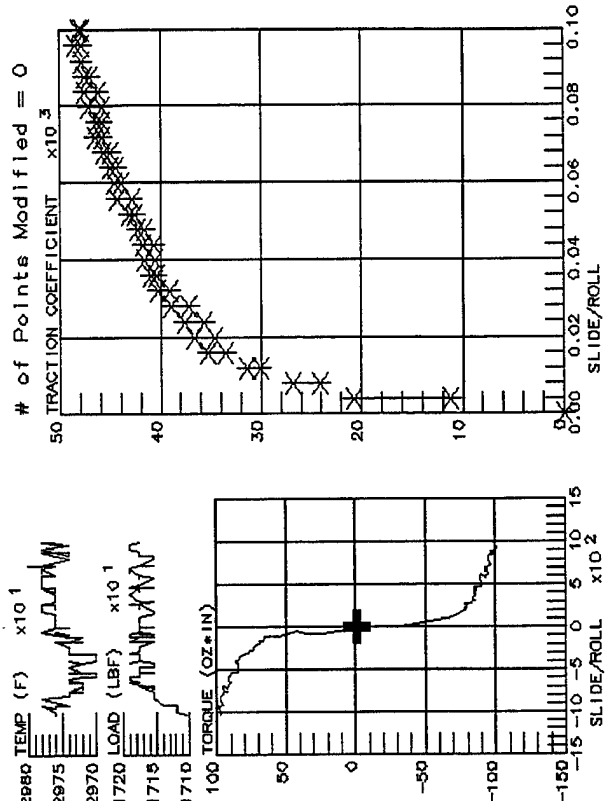
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #238
300F 21LBF 343RPM 13 FILE: bq30012

of Points Modified = 0

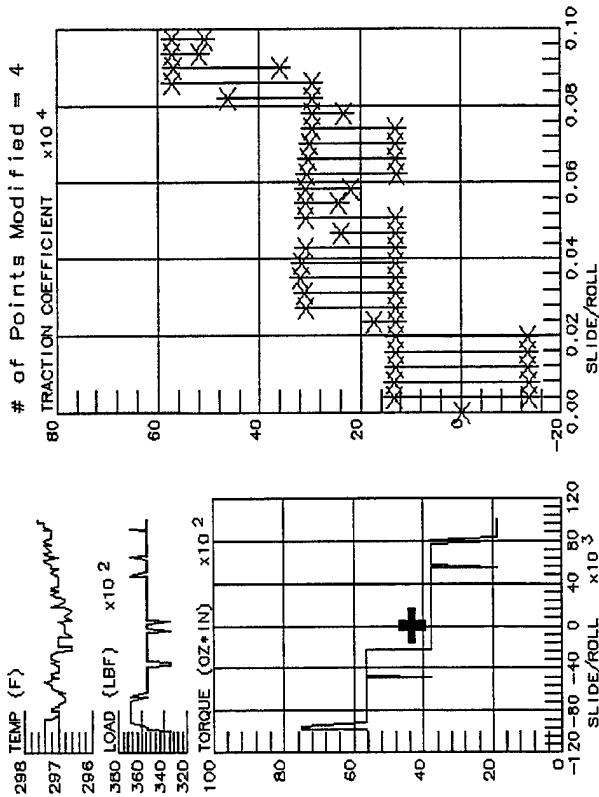


BQ 81-288 ApiezonC+5%Bardhal(VacKote) #240
300F 172LBF 343RPM 15 FILE: bq30012

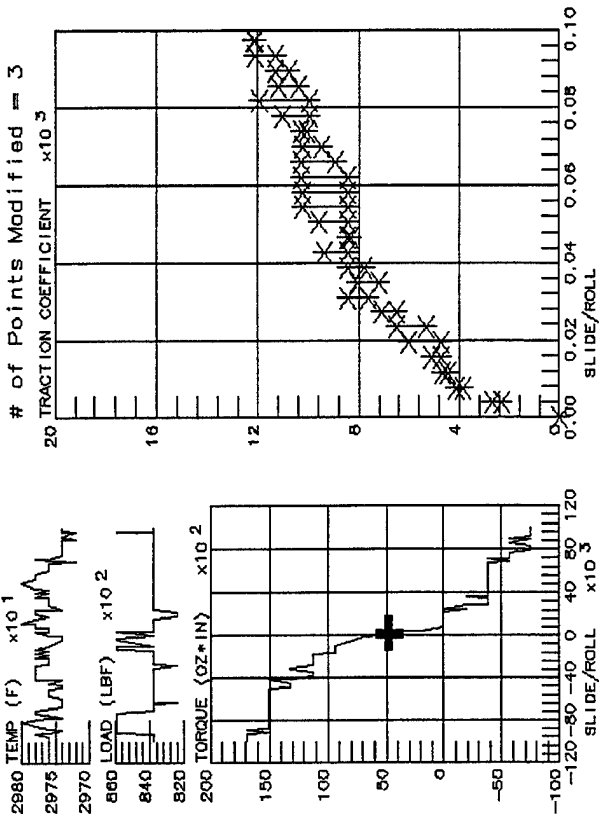
of Points Modified = 0



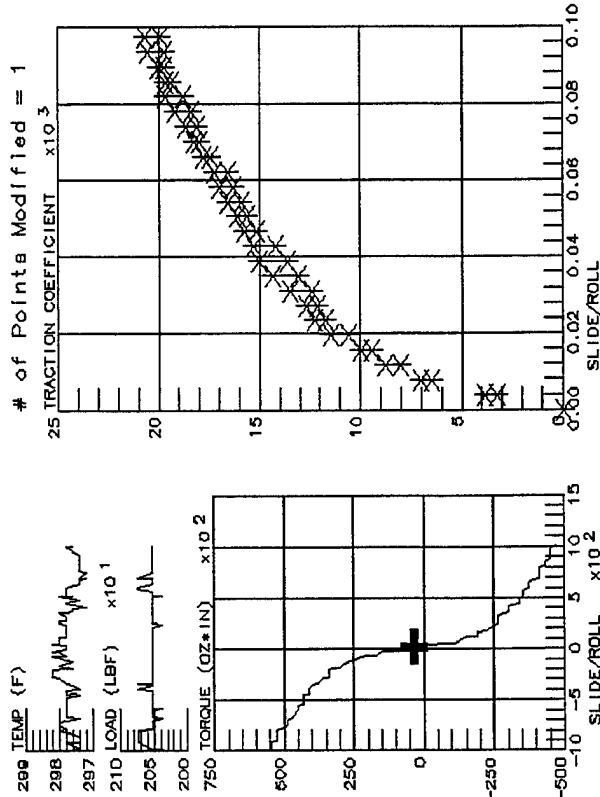
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #241
300F 3LBF 650RPM 16 FILE: bq30012



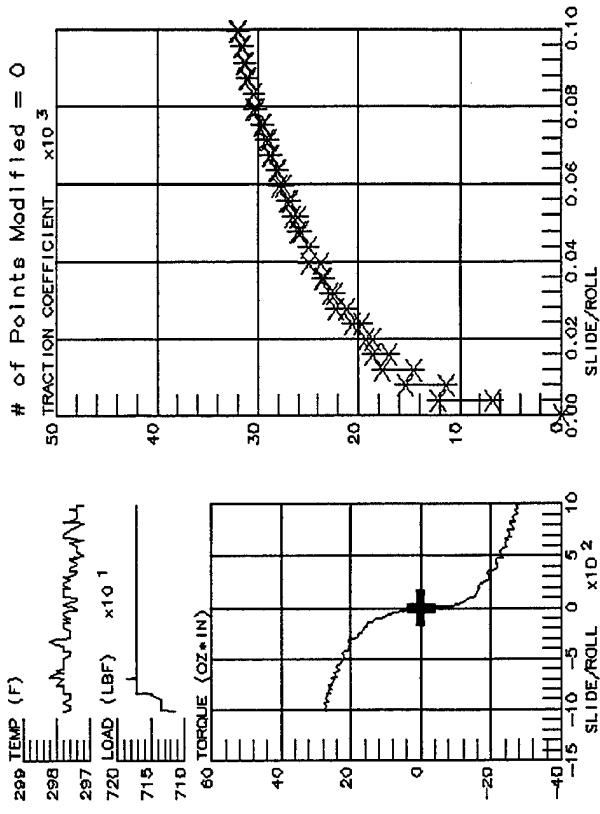
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #242
300F 8LBF 660RPM 17 FILE: bq30012



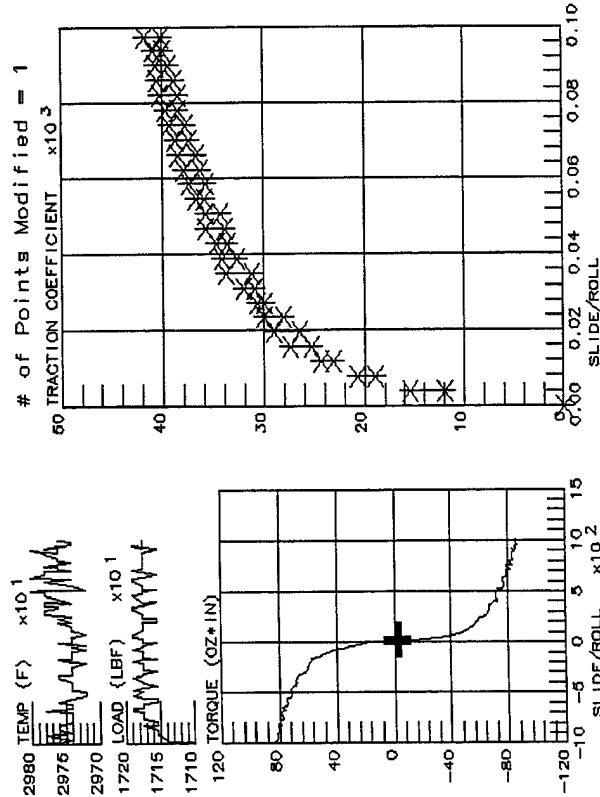
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #243
300F 21LBF 650RPM 18 FILE: bq30012



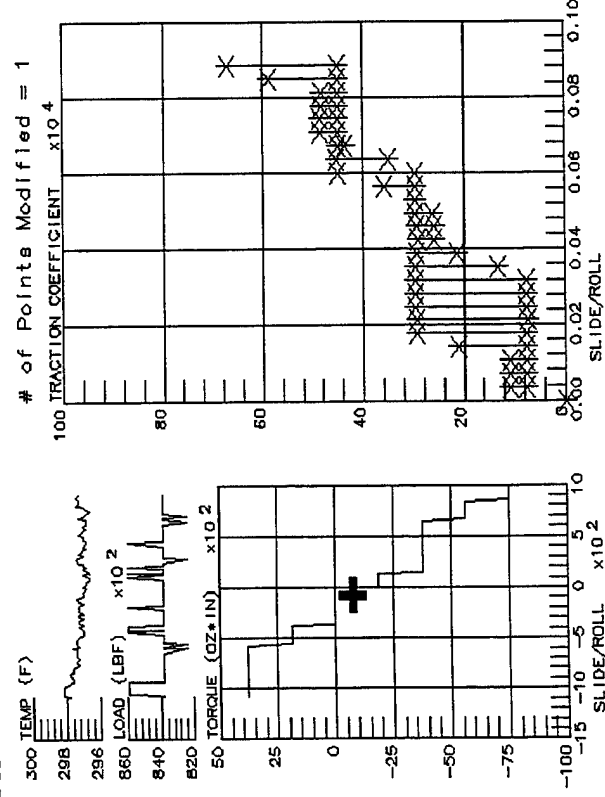
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #244
300F 72LBF 650RPM 19 FILE: bq30012



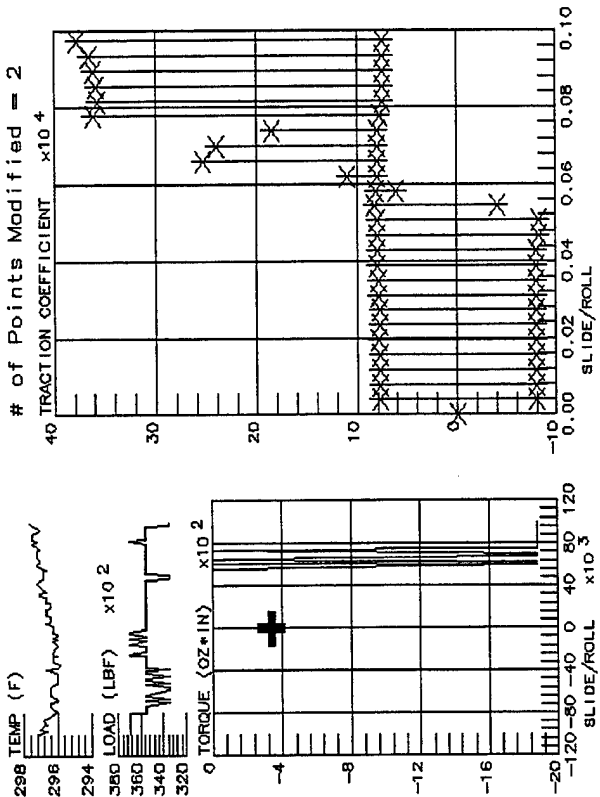
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #246
300F 172LBF 650RPM 20 FILE: bq30012



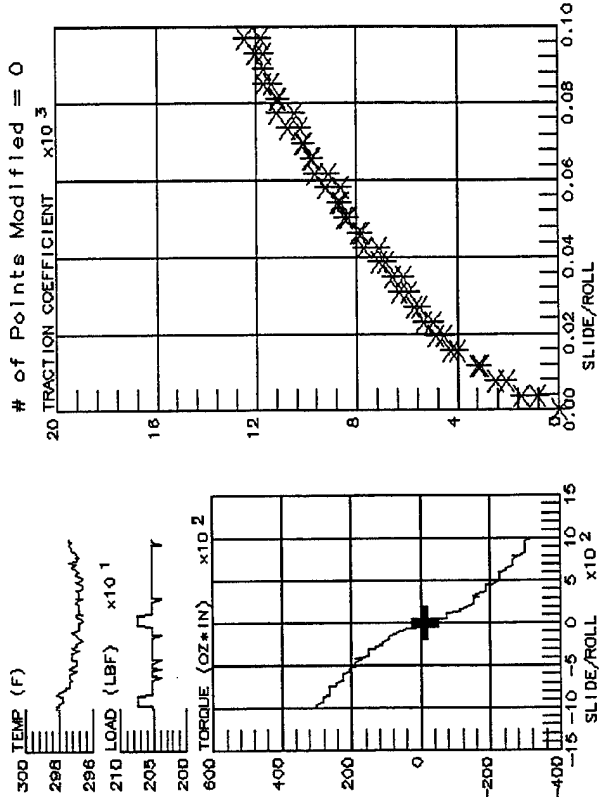
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #247
300F 8LBF 1260RPM 22 FILE: bq30012



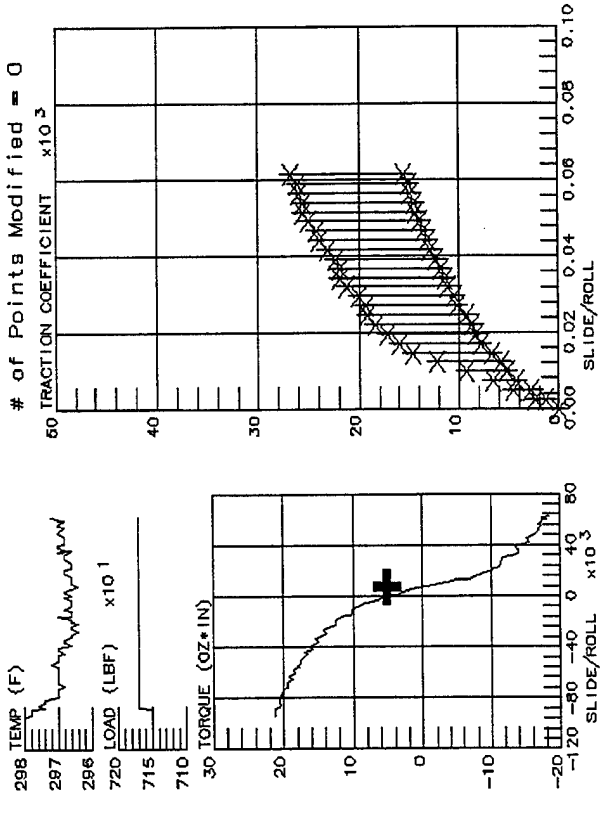
BQ 81-288 ApiezonC+5%Bardhal(VacKote) #248
300F 3LBF 1260RPM 21 FILE: bq30012



BQ 81-288 ApiezonC+5%Bardhal(VacKote) #248
300F 21LBF 1260RPM 23 FILE: bq30012



BQ B1-288 AplezonC+5%Bardhal (VacKote) #249
 300F 72LBF 1200RPM 24 FILE: bq30012



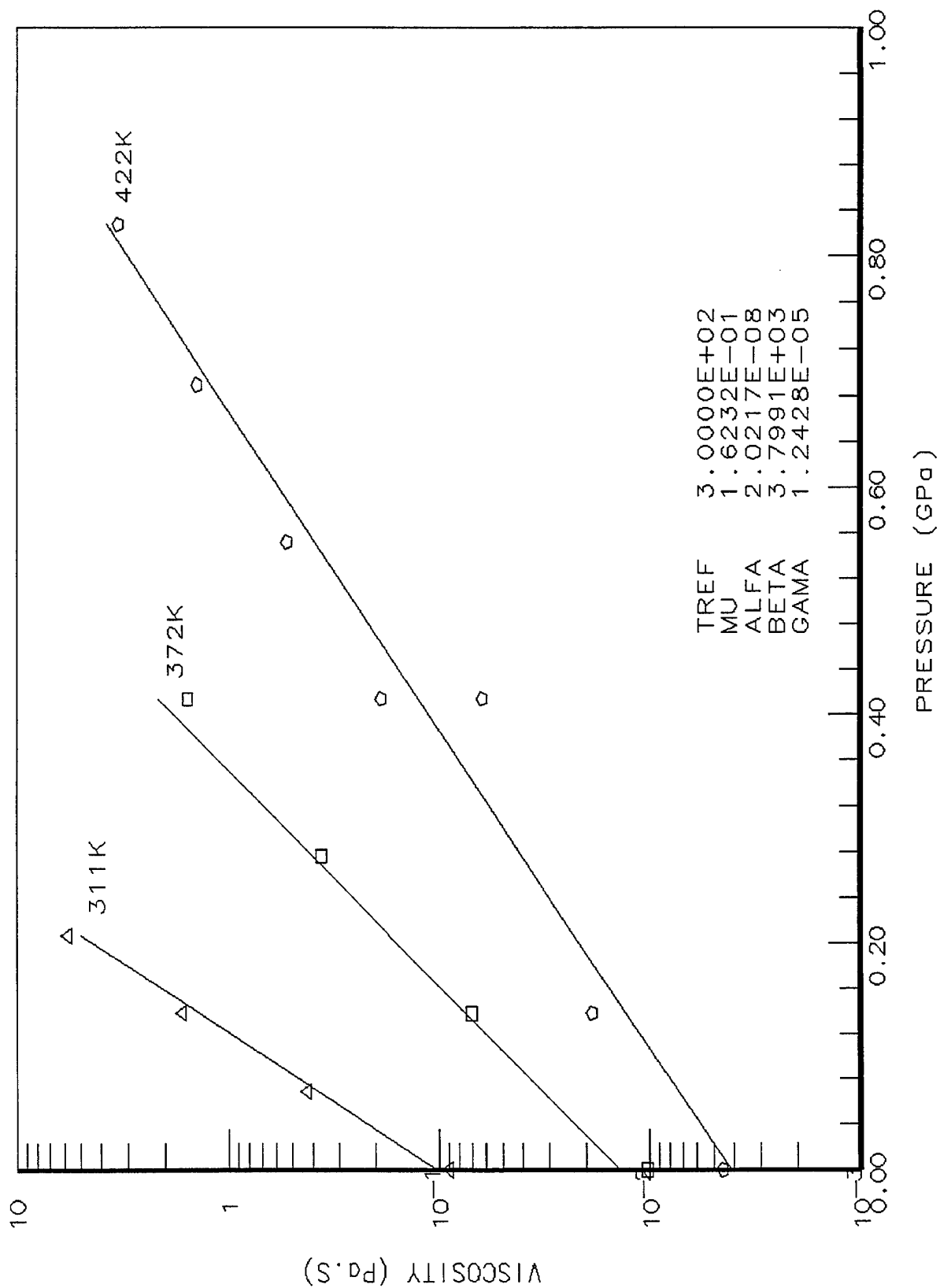
Lubricant name = BQ 81-288 ApiezonC+5%Bardhal(VacKote)

NEWTONIAN MODEL TYPE 1

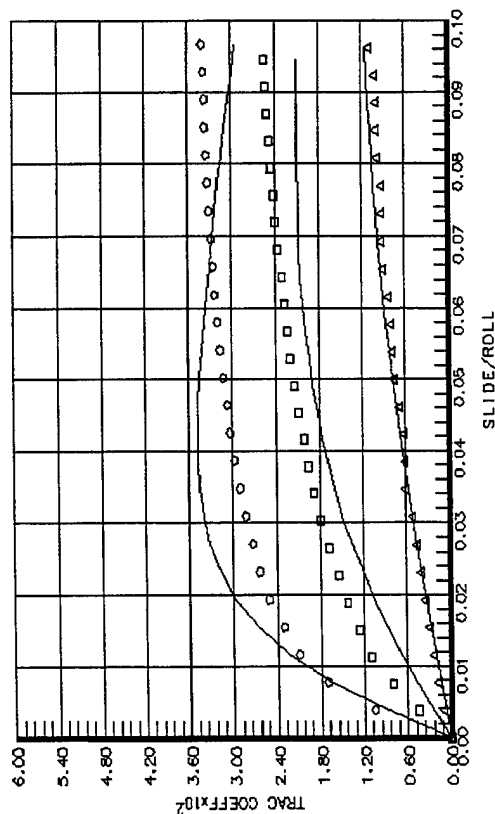
| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| bq1.dat | 3.0000E+02 | 1.0134E+01 | 2.2331E+00 | 6.0000E-09 | 4.5895E-02 |
| bq2.dat | 3.0000E+02 | 1.5239E+01 | 1.3450E+00 | 6.0000E-09 | 3.9419E-02 |
| bq3.dat | 3.0000E+02 | 2.0344E+01 | 1.6764E+00 | 6.0000E-09 | 4.2466E-02 |
| bq4.dat | 3.1111E+02 | 1.0134E+01 | 1.8310E+00 | 6.0000E-09 | 5.1299E-02 |
| bq5.dat | 3.1111E+02 | 1.5239E+01 | 1.5317E+00 | 6.0000E-09 | 4.2507E-02 |
| bq6.dat | 3.1111E+02 | 2.0344E+01 | 1.6084E+00 | 6.0000E-09 | 4.7823E-02 |
| bq7.dat | 3.3889E+02 | 1.0134E+01 | 1.1687E+00 | 6.0000E-09 | 7.1693E-02 |
| bq8.dat | 3.3889E+02 | 1.5239E+01 | 9.9167E-01 | 6.0000E-09 | 5.8403E-02 |
| bq9.dat | 3.3889E+02 | 2.0344E+01 | 1.2157E+00 | 6.0000E-09 | 5.6433E-02 |
| bq10.dat | 3.6667E+02 | 1.0134E+01 | 5.3986E-01 | 6.0000E-09 | 1.1356E-01 |
| bq11.dat | 3.6667E+02 | 1.5239E+01 | 4.8718E-01 | 6.0000E-09 | 7.1228E-02 |
| bq12.dat | 3.6667E+02 | 2.0344E+01 | 6.3070E-01 | 6.0000E-09 | 7.2406E-02 |
| bq13.dat | 3.9444E+02 | 1.0134E+01 | 2.0677E-01 | 6.0000E-09 | 1.5511E-01 |
| bq14.dat | 3.9444E+02 | 1.5239E+01 | 1.9667E-01 | 6.0000E-09 | 1.0585E-01 |
| bq15.dat | 3.9444E+02 | 2.0344E+01 | 3.0396E-01 | 6.0000E-09 | 1.0410E-01 |
| bq16.dat | 4.2222E+02 | 1.0134E+01 | 7.4079E-02 | 6.0000E-09 | 2.3535E-01 |
| bq17.dat | 4.2222E+02 | 1.5239E+01 | 8.1026E-02 | 6.0000E-09 | 1.5502E-01 |

81-288 VAC Kote

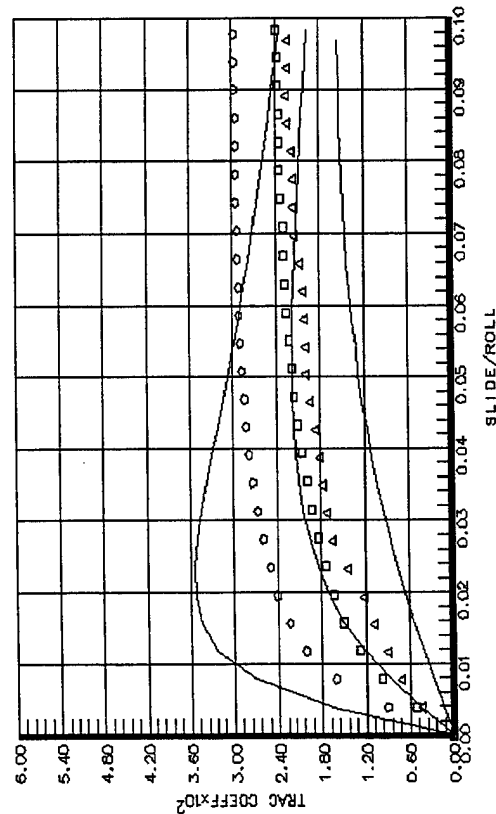
Viscosity Model Type 2



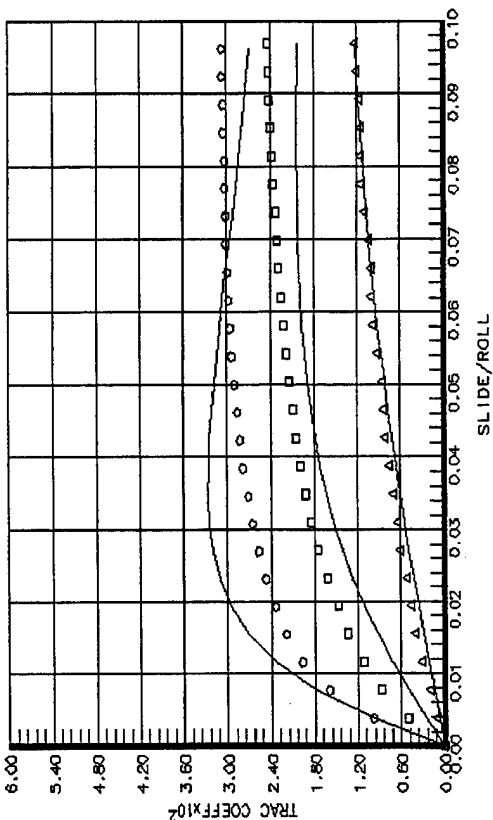
BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq13.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 10.13M/S 394K #174 2.088E-01 8.000E-09 1.551E-01
 320N 10.13M/S 394K #176 2.088E-01 8.000E-09 1.551E-01
 765N 10.13M/S 394K #176 2.088E-01 8.000E-09 1.551E-01
 599MPA 909MPA 1217MPA



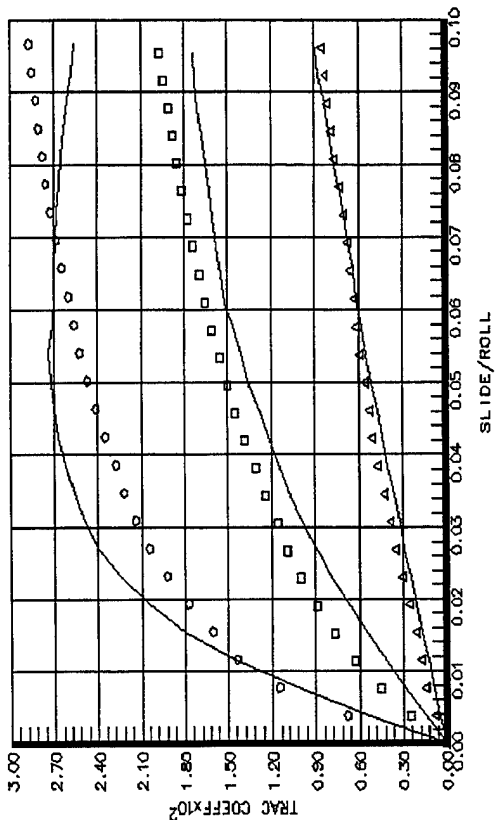
BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq15.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 20.34M/S 394K #184 3.040E-01 8.000E-09 1.041E-01
 320N 20.34M/S 394K #186 3.040E-01 8.000E-09 1.041E-01
 765N 20.34M/S 394K #186 3.040E-01 8.000E-09 1.041E-01
 599MPA 909MPA 1217MPA



BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq14.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 15.24M/S 394K #178 1.967E-01 8.000E-09 1.059E-01
 320N 15.24M/S 394K #180 1.967E-01 8.000E-09 1.059E-01
 765N 15.24M/S 394K #181 1.967E-01 8.000E-09 1.059E-01
 599MPA 909MPA 1217MPA

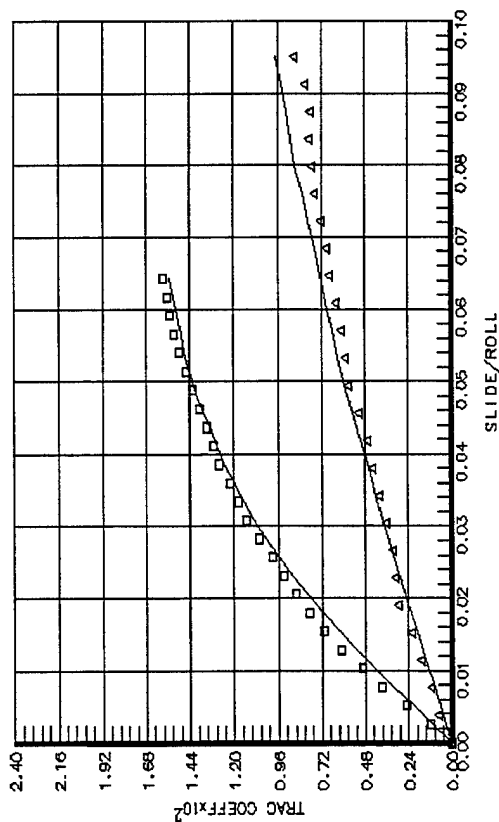


BQ 81-288 ApiezonC+5%Bardhal (VacKote)
 NEWTONIAN MODEL TYPE 1 $bq16.dat$ XMU^* $ALFA^*$ $BETA^*$
 93N 10.13M/S 422K #218 7.408E-02 6.000E-09 2.354E-01
 320N 10.13M/S 422K #220 7.408E-02 6.000E-09 2.354E-01
 765N 10.13M/S 422K #221 7.408E-02 6.000E-09 2.354E-01
 599MPA 909MPA 1217MPA



BQ 81-288 ApiezonC+5%Bardhal (Vackote)

NEWTONIAN MODEL TYPE 1 $\mu q17. \text{ast}$ ALPHA* BETA*
 Δ 598MPa 93N 18.24M/S 422K #224 8.103E-02 8.00E-09 1.58E-01
 □ 910MPa 320N 18.24M/S 422K #226 8.103E-02 8.00E-09 1.58E-01



11. Traction Data Set J: 90-715 Hatcol 3110

Data set name: CO 90-715 ~220 Hatcol 3110
Rolling radii [Disks 1 & 2] (in): 0.75 0.75
Crown radii [Disks 1 & 2] (in): 0.70 0.68

Number of data sets found = 258

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.87E-03 | co80vl #1 |
| 2 | 80.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.52E-03 | co80vl #2 |
| 3 | 80.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.16E-03 | co80vl #3 |
| 4 | 80.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.80E-03 | co80vl #4 |
| 5 | 80.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.28E-04 | co80vl #5 |
| 6 | 80.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.26E-03 | co80vl #6 |
| 7 | 80.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.00E-03 | co80vl #7 |
| 8 | 80.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.28E-04 | co80vl #8 |
| 9 | 80.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.10E-05 | co80vl #9 |
| 10 | 80.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.92E-04 | co80vl #10 |
| 11 | 80.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.45E-04 | co80vl #11 |
| 12 | 80.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.24E-04 | co80vl #12 |
| 13 | 80.00 | 8.30 | 2435.00 | 2696.00 | 2565.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.08E-03 | co80vl #13 |
| 14 | 80.00 | 19.68 | 2435.00 | 2696.00 | 2565.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.32E-04 | co80vl #14 |
| 15 | 80.00 | 38.44 | 2435.00 | 2696.00 | 2565.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.87E-04 | co80vl #15 |
| 16 | 80.00 | 66.43 | 2435.00 | 2696.00 | 2565.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.90E-04 | co80vl #16 |
| 17 | 80.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-02 | co80med #1 |
| 18 | 80.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.97E-03 | co80med #2 |
| 19 | 80.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-03 | co80med #3 |
| 20 | 80.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.41E-04 | co80med #4 |
| 21 | 80.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.63E-04 | co80med #5 |
| 22 | 80.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.91E-04 | co80med #6 |
| 23 | 80.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.39E-04 | co80med #7 |
| 24 | 80.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | co80med #8 |
| 25 | 80.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.11E-04 | co80med #9 |
| 26 | 80.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-04 | co80med #10 |
| 27 | 80.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.87E-05 | co80med #11 |
| 28 | 80.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.47E-04 | co80med #12 |
| 29 | 80.00 | 8.30 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.23E-03 | co80med #13 |
| 30 | 80.00 | 19.68 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.45E-04 | co80med #14 |
| 31 | 80.00 | 38.44 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.08E-04 | co80med #15 |
| 32 | 80.00 | 66.43 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.67E-04 | co80med #16 |
| 33 | 80.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.99E-03 | co80vh #1 |
| 34 | 80.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.32E-04 | co80vh #2 |
| 35 | 80.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | co80vh #3 |
| 36 | 80.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.58E-05 | co80vh #4 |
| 37 | 80.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-03 | co80vh #5 |
| 38 | 80.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.64E-04 | co80vh #6 |
| 39 | 80.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-04 | co80vh #7 |
| 40 | 80.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.68E-04 | co80vh #8 |
| 41 | 80.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.60E-03 | co80vh #9 |
| 42 | 80.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.83E-04 | co80vh #10 |
| 43 | 80.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.39E-04 | co80vh #11 |
| 44 | 80.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-04 | co80vh #12 |
| 45 | 100.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.97E-04 | co100vl #1 |
| 46 | 100.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.06E-04 | co100vl #2 |
| 47 | 100.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-03 | co100vl #3 |
| 48 | 100.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.88E-04 | co100vl #4 |
| 49 | 100.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-03 | co100vl #5 |
| 50 | 100.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.14E-03 | co100vl #6 |

Data set: CO 90-715 ~220 Hatcol 3110continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-03 | co100vl #7 |
| 52 | 100.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.78E-04 | co100vl #8 |
| 53 | 100.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-04 | co100vl #9 |
| 54 | 100.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-04 | co100vl #10 |
| 55 | 100.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.71E-05 | co100vl #11 |
| 56 | 100.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.09E-04 | co100vl #12 |
| 57 | 100.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-04 | co100vlx #1 |
| 58 | 100.00 | 19.68 | 2400.00 | 2670.00 | 2535.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.00E-04 | co100vlx #14 |
| 59 | 100.00 | 38.44 | 2400.00 | 2670.00 | 2535.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.35E-05 | co100vlx #15 |
| 60 | 100.00 | 66.43 | 2400.00 | 2670.00 | 2535.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.82E-05 | co100vlx #16 |
| 61 | 100.00 | 8.30 | 290.00 | 322.00 | 306.00 | 40 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.87E-04 | co100med #1 |
| 62 | 100.00 | 19.68 | 290.00 | 322.00 | 306.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-03 | co100med #2 |
| 63 | 100.00 | 38.44 | 290.00 | 322.00 | 306.00 | 2 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.40E-18 | co100med #3 |
| 64 | 100.00 | 8.30 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-03 | co100mex #1 |
| 65 | 100.00 | 19.68 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.37E-04 | co100mex #2 |
| 66 | 100.00 | 38.44 | 290.00 | 322.00 | 306.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.56E-03 | co100mex #3 |
| 67 | 100.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.89E-03 | co100mex #4 |
| 68 | 100.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.48E-04 | co100mex #5 |
| 69 | 100.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-04 | co100mex #6 |
| 70 | 100.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.85E-04 | co100mex #7 |
| 71 | 100.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.52E-04 | co100mex #8 |
| 72 | 100.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-04 | co100mex #9 |
| 73 | 100.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | co100mex #10 |
| 74 | 100.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.38E-05 | co100mex #11 |
| 75 | 100.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.54E-05 | co100mex #12 |
| 76 | 100.00 | 8.30 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-03 | co100mex #13 |
| 77 | 100.00 | 19.68 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.42E-04 | co100mex #14 |
| 78 | 100.00 | 38.44 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-04 | co100mex #15 |
| 79 | 100.00 | 66.43 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.60E-05 | co100mex #16 |
| 80 | 100.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.77E-04 | co100vh #1 |
| 81 | 100.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.01E-04 | co100vh #2 |
| 82 | 100.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.03E-04 | co100vh #3 |
| 83 | 100.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-04 | co100vh #4 |
| 84 | 100.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.28E-03 | co100vh #5 |
| 85 | 100.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-03 | co100vh #6 |
| 86 | 100.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.27E-04 | co100vh #7 |
| 87 | 100.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.20E-05 | co100vh #8 |
| 88 | 100.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-03 | co100vh #9 |
| 89 | 100.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.37E-04 | co100vh #10 |
| 90 | 100.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.73E-05 | co100vh #11 |
| 91 | 100.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.71E-04 | co100vh #12 |
| 92 | 150.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-03 | co150vl #1 |
| 93 | 150.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.03E-04 | co150vl #2 |
| 94 | 150.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.15E-04 | co150vl #3 |
| 95 | 150.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-03 | co150vl #4 |
| 96 | 150.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.39E-03 | co150vl #5 |
| 97 | 150.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.76E-04 | co150vl #6 |
| 98 | 150.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.65E-05 | co150vl #7 |
| 99 | 150.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.91E-05 | co150vl #8 |
| 100 | 150.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.24E-04 | co150vl #9 |
| 101 | 150.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-04 | co150vl #10 |
| 102 | 150.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.65E-05 | co150vl #11 |
| 103 | 150.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.62E-04 | co150vl #12 |
| 104 | 150.00 | 8.30 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.67E-05 | co150vl #13 |
| 105 | 150.00 | 19.68 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.01E-04 | co150vl #14 |
| 106 | 150.00 | 38.44 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.52E-05 | co150vl #15 |
| 107 | 150.00 | 66.43 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.16E-04 | co150vl #16 |
| 108 | 150.00 | 8.30 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.01E-03 | co150med #1 |
| 109 | 150.00 | 19.68 | 290.00 | 322.00 | 306.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.64E-04 | co150med #2 |
| 110 | 150.00 | 38.44 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.99E-04 | co150med #3 |
| 111 | 150.00 | 66.43 | 290.00 | 322.00 | 306.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.46E-04 | co150med #4 |
| 112 | 150.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.54E-04 | co150med #5 |
| 113 | 150.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.44E-04 | co150med #6 |
| 114 | 150.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-03 | co150med #7 |
| 115 | 150.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.41E-04 | co150med #8 |
| 116 | 150.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | co150med #9 |
| 117 | 150.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.89E-04 | co150med #10 |
| 118 | 150.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.59E-04 | co150med #11 |
| 119 | 150.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-04 | co150med #12 |
| 120 | 150.00 | 8.30 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-04 | co150med #13 |

Data set: CO 90-715 ~220 Hatcol 3110continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 150.00 | 19.68 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.07E-05 | co150med #14 |
| 122 | 150.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.80E-04 | co150vh #1 |
| 123 | 150.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-04 | co150vh #2 |
| 124 | 150.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.12E-04 | co150vh #3 |
| 125 | 150.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.78E-04 | co150vh #4 |
| 126 | 150.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.06E-03 | co150vh #5 |
| 127 | 150.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.34E-05 | co150vh #6 |
| 128 | 150.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-04 | co150vh #7 |
| 129 | 150.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.96E-04 | co150vh #8 |
| 130 | 150.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.23E-04 | co150vh #9 |
| 131 | 150.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.29E-04 | co150vh #10 |
| 132 | 150.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-04 | co150vh #11 |
| 133 | 150.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.03E-05 | co150vh #12 |
| 134 | 200.00 | 8.30 | 290.00 | 322.00 | 306.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.33E-03 | co20-30l #1 |
| 135 | 200.00 | 19.68 | 290.00 | 322.00 | 306.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-03 | co20-30l #2 |
| 136 | 200.00 | 38.44 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | co20-30l #3 |
| 137 | 200.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.92E-04 | co20-30l #4 |
| 138 | 200.00 | 19.68 | 618.00 | 684.00 | 651.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.93E-04 | co20-30l #5 |
| 139 | 200.00 | 38.44 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.93E-04 | co20-30l #6 |
| 140 | 250.00 | 8.30 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-03 | co20-30l #7 |
| 141 | 250.00 | 19.68 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-03 | co20-30l #8 |
| 142 | 250.00 | 38.44 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.52E-04 | co20-30l #9 |
| 143 | 250.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.94E-03 | co20-30l #10 |
| 144 | 250.00 | 19.68 | 618.00 | 684.00 | 651.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.99E-04 | co20-30l #11 |
| 145 | 250.00 | 38.44 | 618.00 | 684.00 | 651.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-03 | co20-30l #12 |
| 146 | 300.00 | 8.30 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.45E-03 | co20-30l #13 |
| 147 | 300.00 | 19.68 | 290.00 | 322.00 | 306.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | co20-30l #14 |
| 148 | 300.00 | 38.44 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.19E-03 | co20-30l #15 |
| 149 | 300.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-03 | co20-30l #16 |
| 150 | 300.00 | 19.68 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.71E-04 | co20-30l #17 |
| 151 | 300.00 | 38.44 | 618.00 | 684.00 | 651.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.07E-04 | co20-30l #18 |
| 152 | 200.00 | 8.30 | 290.00 | 322.00 | 306.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.33E-03 | co20-30m #1 |
| 153 | 200.00 | 19.68 | 290.00 | 322.00 | 306.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.01E-03 | co20-30m #2 |
| 154 | 200.00 | 38.44 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | co20-30m #3 |
| 155 | 200.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.92E-04 | co20-30m #4 |
| 156 | 200.00 | 19.68 | 618.00 | 684.00 | 651.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.93E-04 | co20-30m #5 |
| 157 | 200.00 | 38.44 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.93E-04 | co20-30m #6 |
| 158 | 250.00 | 8.30 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-03 | co20-30m #7 |
| 159 | 250.00 | 19.68 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-03 | co20-30m #8 |
| 160 | 250.00 | 38.44 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.52E-04 | co20-30m #9 |
| 161 | 250.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.94E-03 | co20-30m #10 |
| 162 | 250.00 | 19.68 | 618.00 | 684.00 | 651.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.99E-04 | co20-30m #11 |
| 163 | 250.00 | 38.44 | 618.00 | 684.00 | 651.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-03 | co20-30m #12 |
| 164 | 300.00 | 8.30 | 290.00 | 322.00 | 306.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.45E-03 | co20-30m #13 |
| 165 | 300.00 | 19.68 | 290.00 | 322.00 | 306.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-03 | co20-30m #14 |
| 166 | 300.00 | 38.44 | 290.00 | 322.00 | 306.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.19E-03 | co20-30m #15 |
| 167 | 300.00 | 8.30 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-03 | co20-30m #16 |
| 168 | 300.00 | 19.68 | 618.00 | 684.00 | 651.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.71E-04 | co20-30m #17 |
| 169 | 300.00 | 38.44 | 618.00 | 684.00 | 651.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.07E-04 | co20-30m #18 |
| 170 | 200.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.03E-03 | co200vl #1 |
| 171 | 200.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.33E-03 | co200vl #2 |
| 172 | 200.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.63E-04 | co200vl #3 |
| 173 | 200.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-03 | co200vl #4 |
| 174 | 200.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.76E-04 | co200vl #5 |
| 175 | 200.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-03 | co200vl #6 |
| 176 | 200.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.04E-04 | co200vl #7 |
| 177 | 200.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.04E-04 | co200vl #8 |
| 178 | 200.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-04 | co200vl #9 |
| 179 | 200.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.17E-04 | co200vl #10 |
| 180 | 200.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.88E-05 | co200vl #11 |
| 181 | 200.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-04 | co200vl #12 |
| 182 | 200.00 | 8.30 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.82E-04 | co200vl #13 |
| 183 | 200.00 | 19.68 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.55E-05 | co200vl #14 |
| 184 | 200.00 | 38.44 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.79E-04 | co200vl #15 |
| 185 | 200.00 | 66.43 | 2435.00 | 2690.00 | 2562.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.14E-05 | co200vl #16 |
| 186 | 200.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.92E-04 | co200vh #1 |
| 187 | 200.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.13E-04 | co200vh #2 |
| 188 | 200.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.58E-05 | co200vh #3 |
| 189 | 200.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.79E-05 | co200vh #4 |
| 190 | 200.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.70E-03 | co200vh #5 |

Data set: CO 90-715 ~220 Hatcol 3110continued

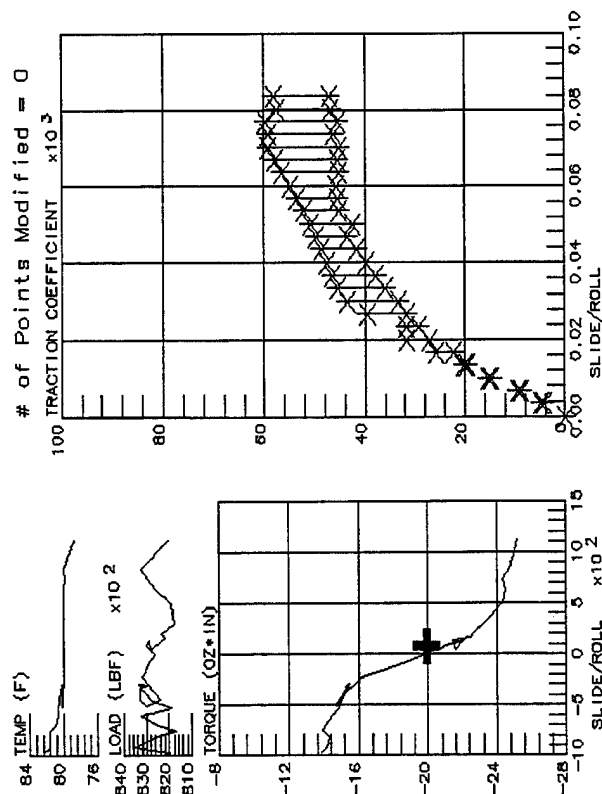
| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 191 | 200.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.47E-05 | co200vh #6 |
| 192 | 200.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.14E-04 | co200vh #7 |
| 193 | 200.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.36E-05 | co200vh #8 |
| 194 | 200.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.85E-04 | co200vh #9 |
| 195 | 200.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.72E-04 | co200vh #10 |
| 196 | 200.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.20E-04 | co200vh #11 |
| 197 | 200.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.58E-04 | co200vh #12 |
| 198 | 250.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-03 | co25-30m #1 |
| 199 | 250.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.98E-03 | co25-30m #2 |
| 200 | 250.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.32E-03 | co25-30m #3 |
| 201 | 250.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.15E-04 | co25-30m #4 |
| 202 | 250.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-03 | co25-30m #5 |
| 203 | 250.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.11E-03 | co25-30m #6 |
| 204 | 250.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-03 | co25-30m #7 |
| 205 | 250.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.29E-04 | co25-30m #8 |
| 206 | 250.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.42E-04 | co25-30m #9 |
| 207 | 250.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.44E-04 | co25-30m #10 |
| 208 | 250.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.14E-04 | co25-30m #11 |
| 209 | 250.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.04E-04 | co25-30m #12 |
| 210 | 250.00 | 8.30 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.85E-04 | co25-30m #13 |
| 211 | 250.00 | 19.68 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.65E-04 | co25-30m #14 |
| 212 | 250.00 | 38.44 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.31E-05 | co25-30m #15 |
| 213 | 250.00 | 66.43 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-05 | co25-30m #16 |
| 214 | 300.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-02 | co25-30m #17 |
| 215 | 300.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-02 | co25-30m #18 |
| 216 | 300.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.31E-03 | co25-30m #19 |
| 217 | 300.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-03 | co25-30m #20 |
| 218 | 300.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-03 | co25-30m #21 |
| 219 | 300.00 | 19.68 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.21E-03 | co25-30m #22 |
| 220 | 300.00 | 38.44 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.65E-02 | co25-30m #23 |
| 221 | 300.00 | 66.43 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.05E-03 | co25-30m #24 |
| 222 | 300.00 | 8.30 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.99E-03 | co25-30m #25 |
| 223 | 300.00 | 19.68 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.83E-04 | co25-30m #26 |
| 224 | 300.00 | 38.44 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.51E-03 | co25-30m #27 |
| 225 | 300.00 | 66.43 | 1200.00 | 1328.00 | 1264.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.33E-04 | co25-30m #28 |
| 226 | 300.00 | 8.30 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.12E-04 | co25-30m #29 |
| 227 | 300.00 | 19.68 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.90E-04 | co25-30m #30 |
| 228 | 300.00 | 38.44 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.59E-04 | co25-30m #31 |
| 229 | 300.00 | 66.43 | 2435.00 | 2700.00 | 2567.50 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.37E-04 | co25-30m #32 |
| 230 | 250.00 | 8.30 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.91E-03 | co250vl #1 |
| 231 | 250.00 | 19.68 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.98E-03 | co250vl #2 |
| 232 | 250.00 | 38.44 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.91E-03 | co250vl #3 |
| 233 | 250.00 | 66.43 | 290.00 | 322.00 | 306.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.26E-03 | co250vl #4 |
| 234 | 250.00 | 8.30 | 618.00 | 684.00 | 651.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.63E-04 | co250vl #5 |
| 235 | 250.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.38E-04 | co250vh #1 |
| 236 | 250.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.73E-05 | co250vh #2 |
| 237 | 250.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-04 | co250vh #3 |
| 238 | 250.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.12E-05 | co250vh #4 |
| 239 | 250.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.30E-03 | co250vh #5 |
| 240 | 250.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.61E-05 | co250vh #6 |
| 241 | 250.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.21E-05 | co250vh #7 |
| 242 | 250.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-04 | co250vh #8 |
| 243 | 250.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-04 | co250vh #9 |
| 244 | 250.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-04 | co250vh #10 |
| 245 | 250.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.59E-05 | co250vh #11 |
| 246 | 250.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.01E-05 | co250vh #12 |
| 247 | 300.00 | 8.30 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.73E-04 | co300vh #1 |
| 248 | 300.00 | 19.68 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.00E-04 | co300vh #2 |
| 249 | 300.00 | 38.44 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.39E-05 | co300vh #3 |
| 250 | 300.00 | 66.43 | 4842.00 | 5352.00 | 5097.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.60E-04 | co300vh #4 |
| 251 | 300.00 | 8.30 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.99E-03 | co300vh #5 |
| 252 | 300.00 | 19.68 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.01E-05 | co300vh #6 |
| 253 | 300.00 | 38.44 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.34E-04 | co300vh #7 |
| 254 | 300.00 | 66.43 | 7280.00 | 8050.00 | 7665.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-04 | co300vh #8 |
| 255 | 300.00 | 8.30 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.70E-04 | co300vh #9 |
| 256 | 300.00 | 19.68 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.84E-05 | co300vh #10 |
| 257 | 300.00 | 38.44 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.03E-04 | co300vh #11 |
| 258 | 300.00 | 66.43 | 9700.00 | 10750.00 | 10225.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-05 | co300vh #12 |

Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-------------|
| co1.dat | 80.00 | 1264.00 | 26 27 28 |
| co2.dat | 80.00 | 2566.00 | 14 15 16 |
| co3.dat | 80.00 | 5097.00 | 34 35 36 |
| co4.dat | 80.00 | 7665.00 | 38 39 40 |
| co5.dat | 80.00 | 10225.00 | 42 43 44 |
| co6.dat | 100.00 | 1264.00 | 73 74 75 |
| co7.dat | 100.00 | 5097.00 | 81 82 83 |
| co8.dat | 100.00 | 7665.00 | 85 86 87 |
| co9.dat | 100.00 | 10225.00 | 89 90 91 |
| co10.dat | 150.00 | 1264.00 | 101 102 119 |
| co11.dat | 150.00 | 5097.00 | 123 124 125 |
| co12.dat | 150.00 | 7665.00 | 127 128 129 |
| co13.dat | 150.00 | 10225.00 | 131 132 133 |
| co14.dat | 200.00 | 1264.00 | 179 180 181 |
| co15.dat | 200.00 | 5097.00 | 187 188 189 |
| co16.dat | 200.00 | 7665.00 | 191 192 193 |
| co17.dat | 200.00 | 10225.00 | 195 196 197 |
| co18.dat | 250.00 | 1264.00 | 207 208 209 |
| co19.dat | 250.00 | 5097.00 | 236 237 238 |
| co20.dat | 250.00 | 7665.00 | 240 241 242 |
| co21.dat | 250.00 | 10225.00 | 244 245 246 |
| co22.dat | 300.00 | 1264.00 | 223 224 225 |
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| co25.dat | 300.00 | 10225.00 | 256 257 258 |

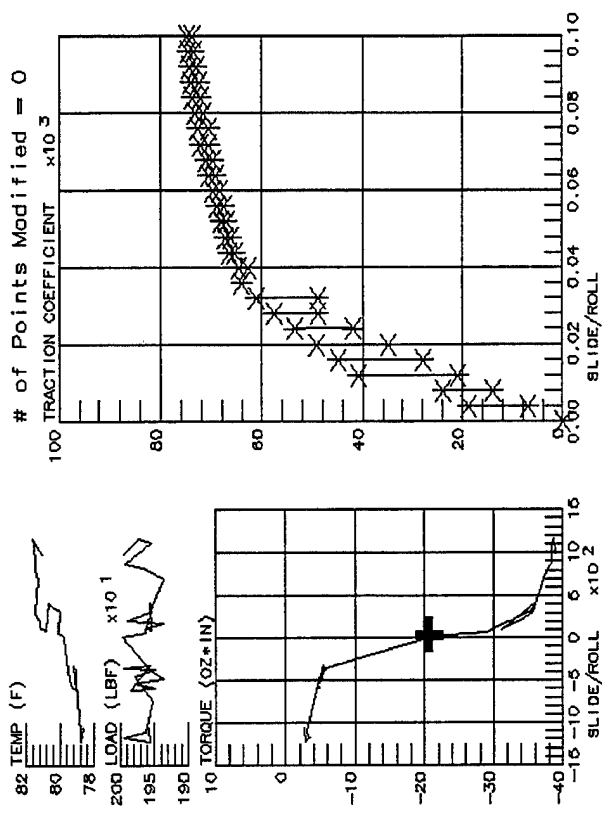
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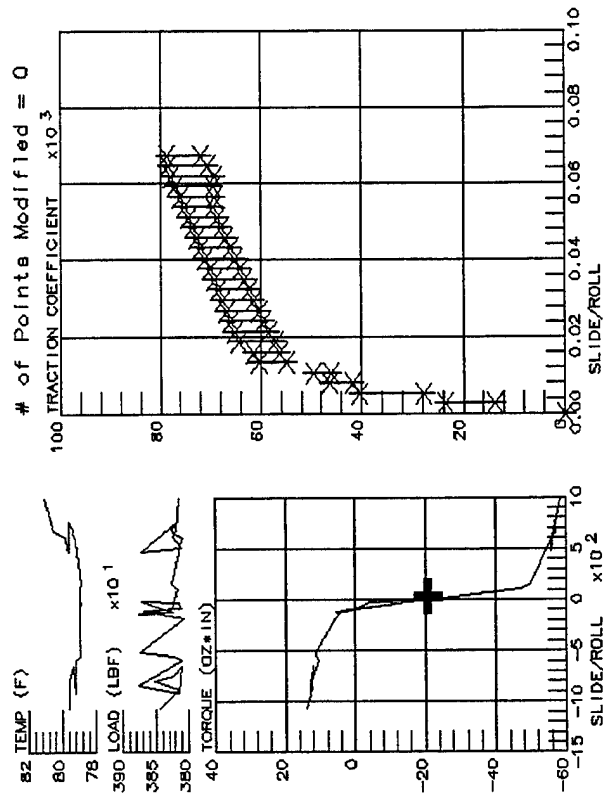
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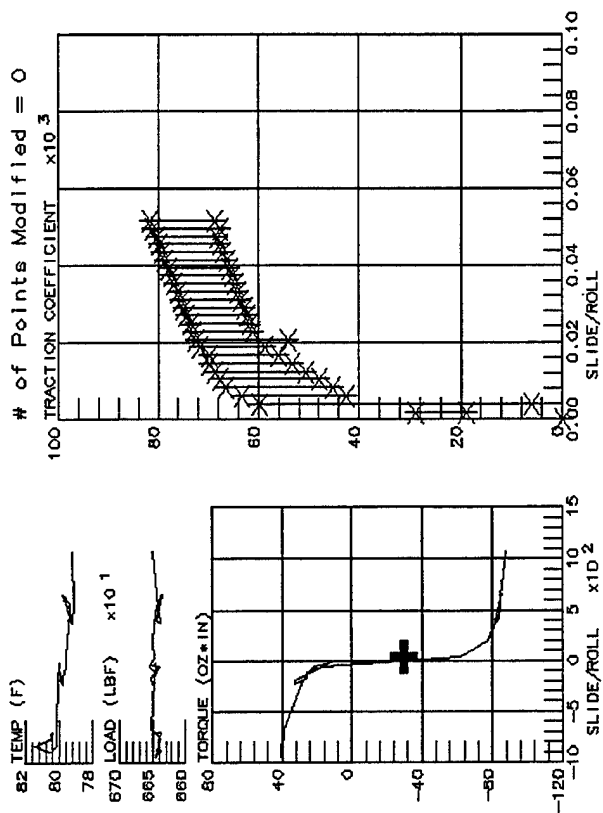
CO 90-715 ~220 Hatcol 3110
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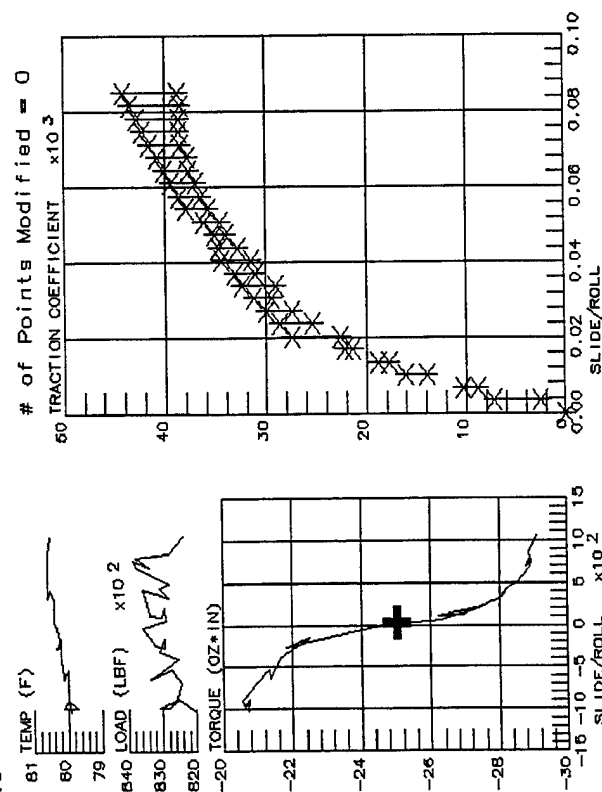


CO 90-715 ~220 Hatcol 3110
80F 66LBF 306RPM 4 FILE: co80v1

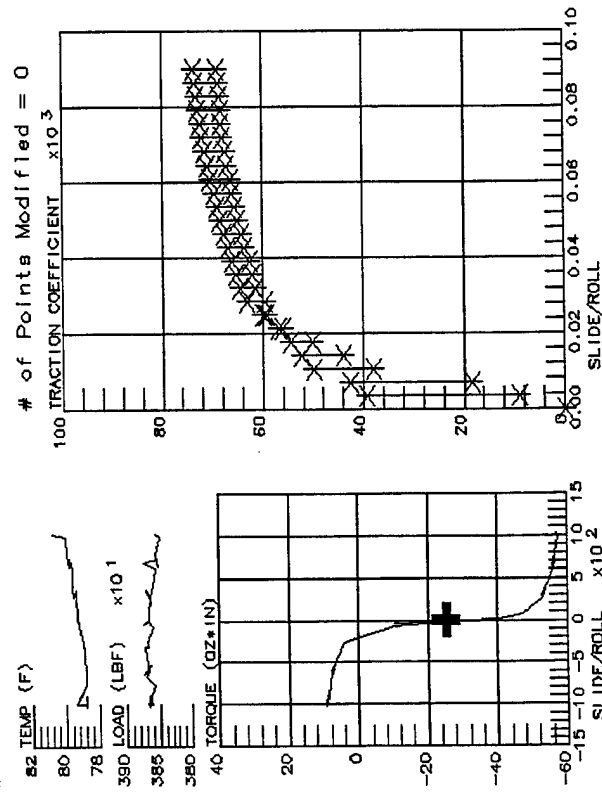
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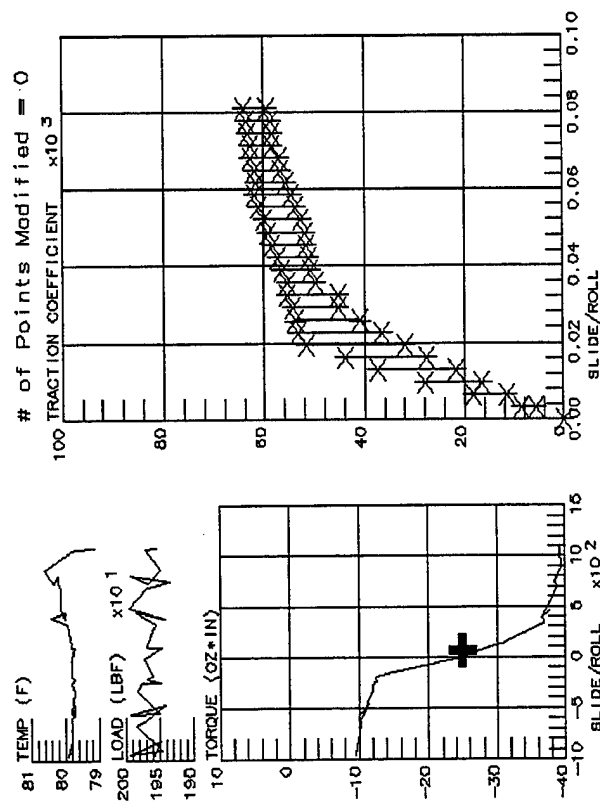
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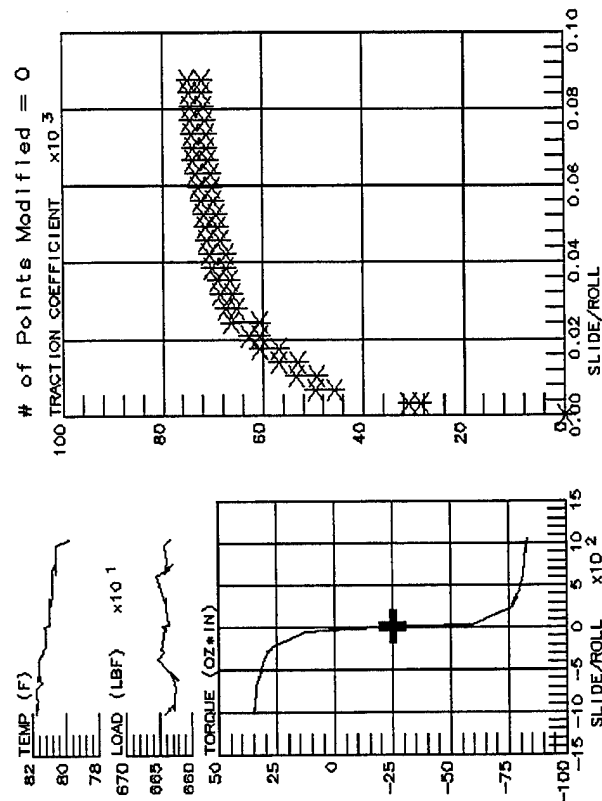
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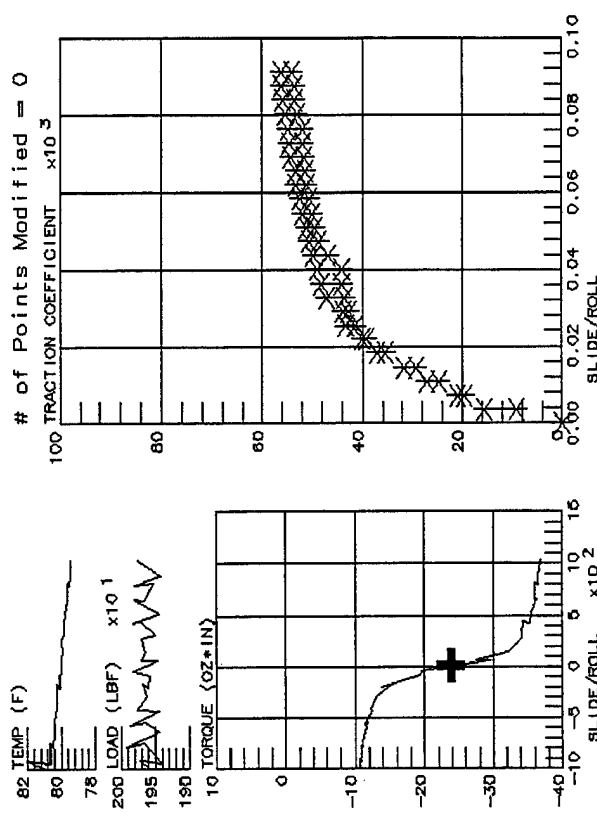
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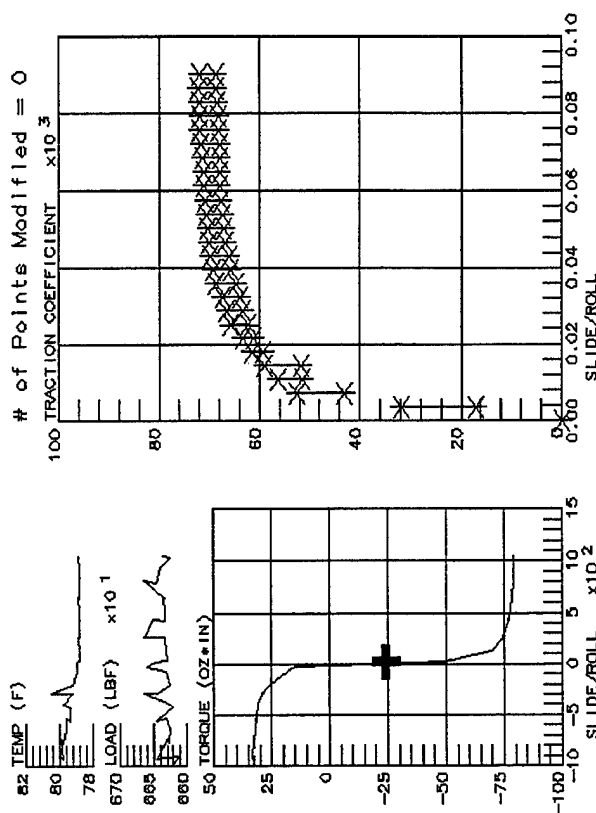
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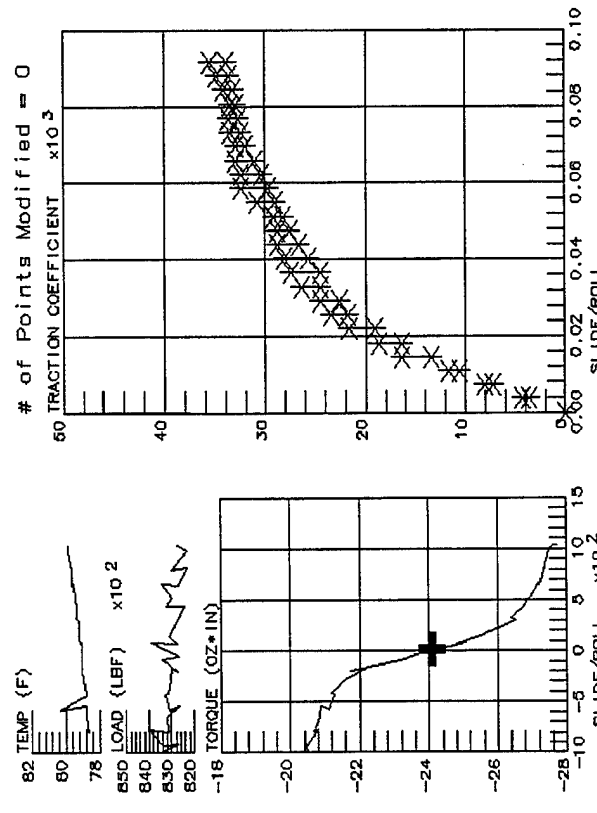
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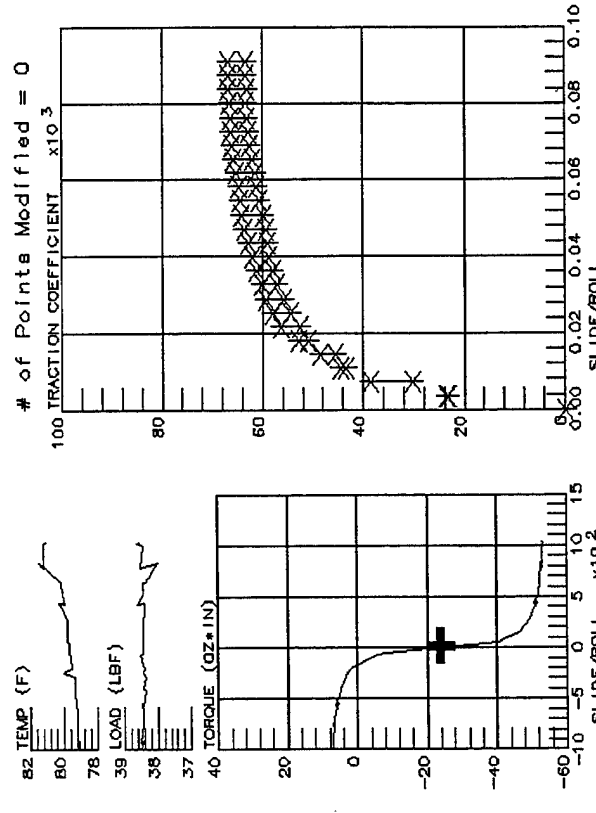
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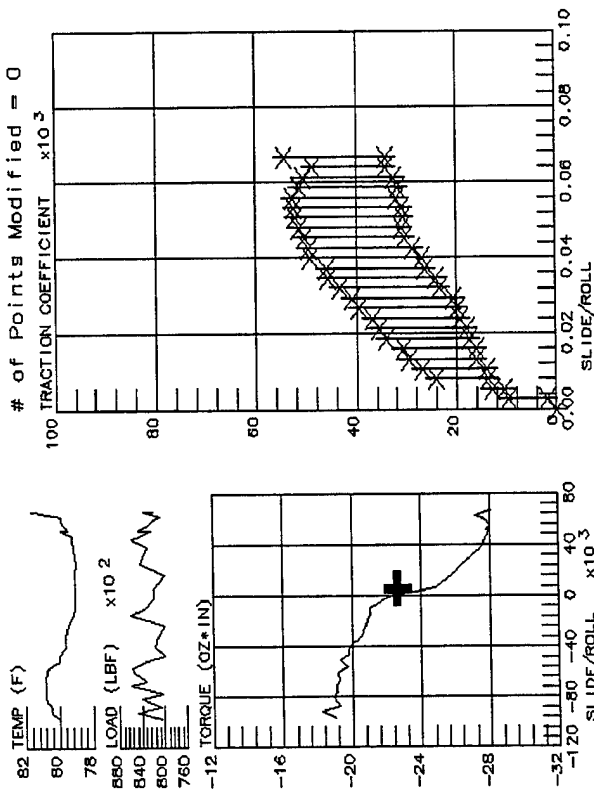


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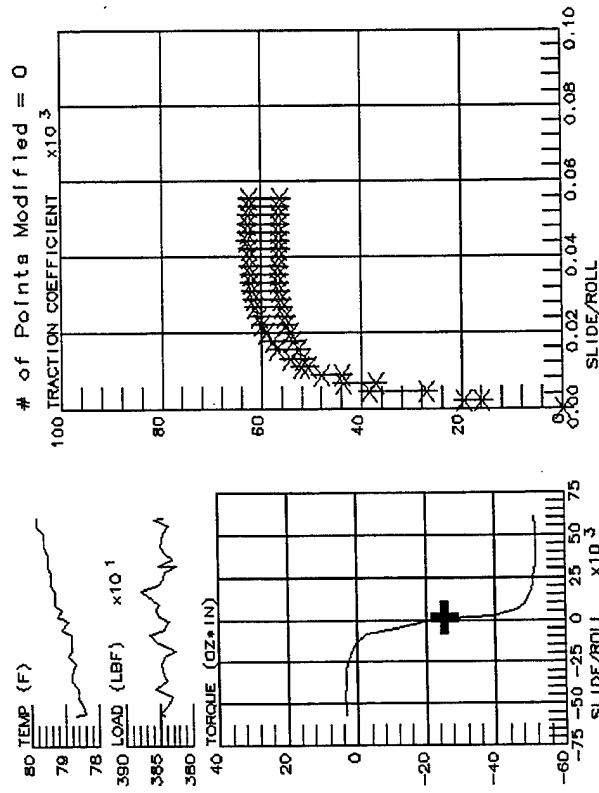
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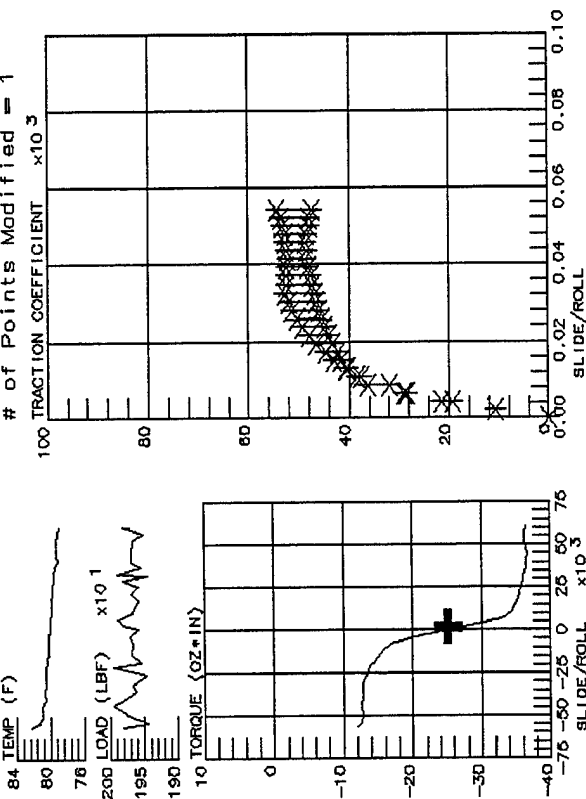
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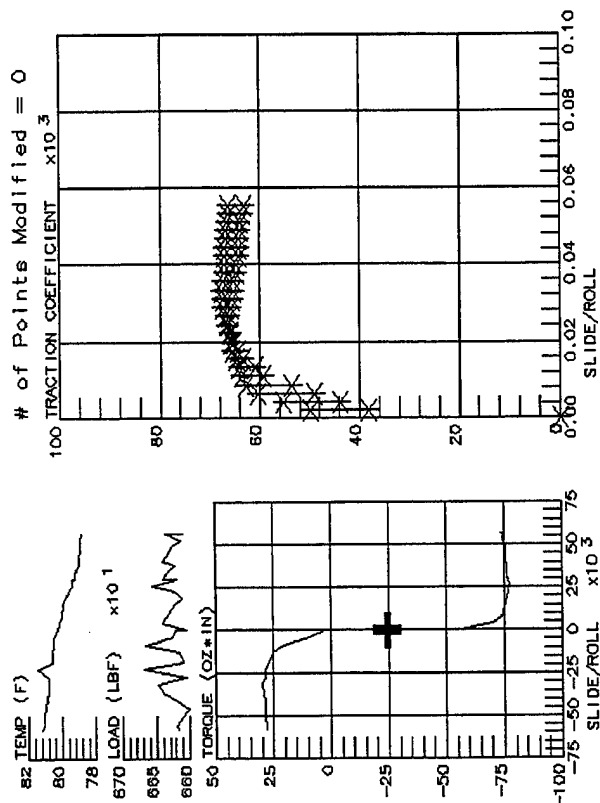
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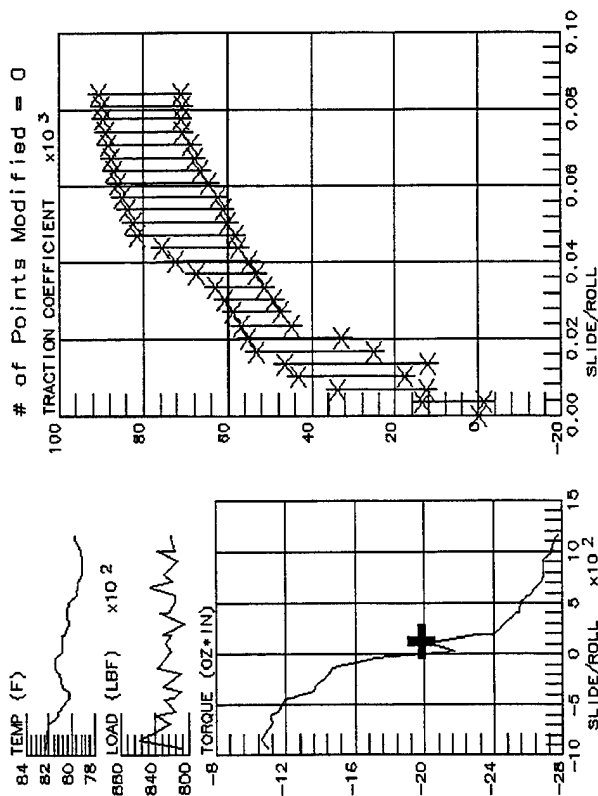


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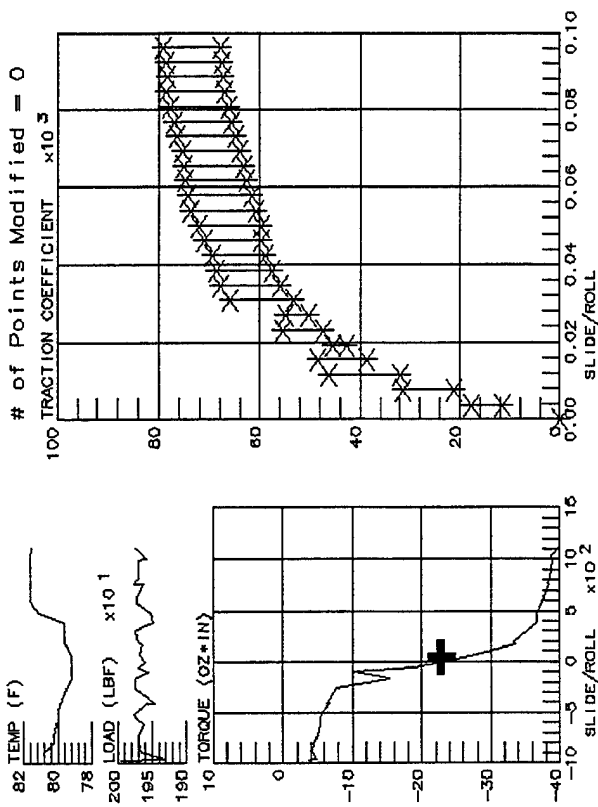
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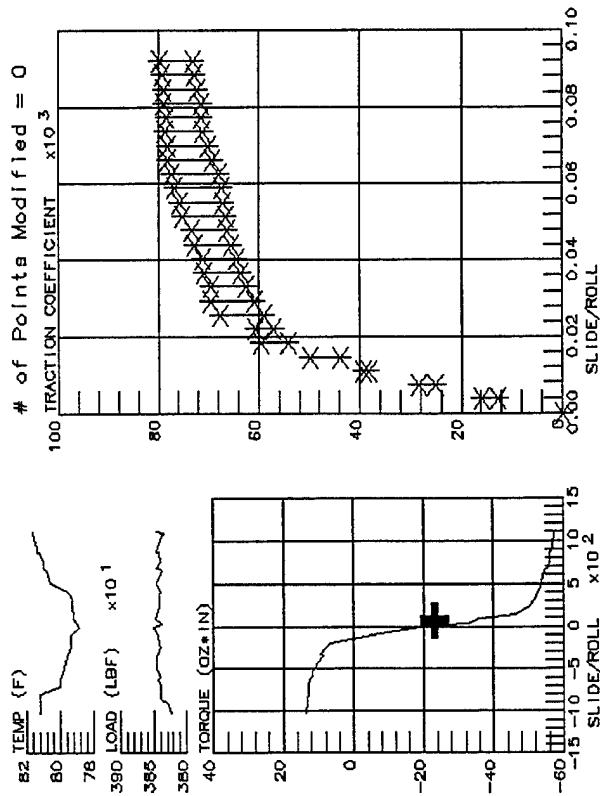
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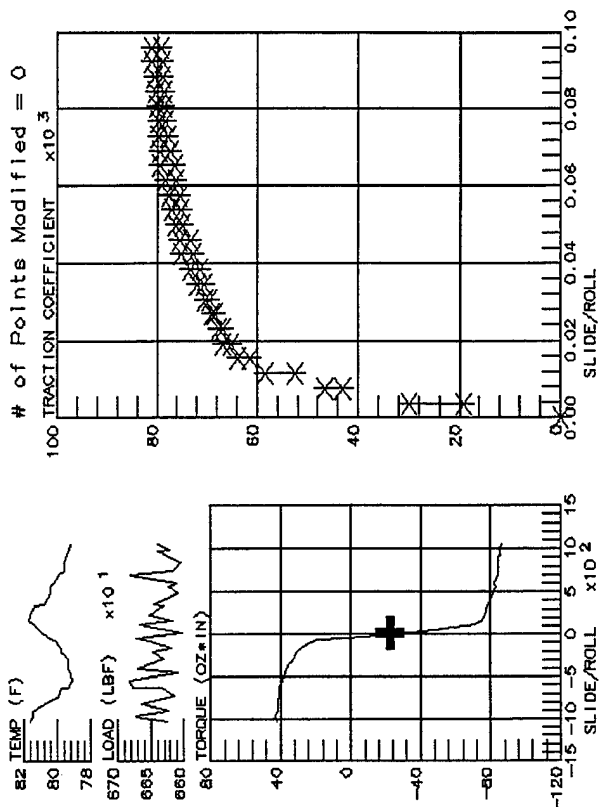
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CO 90-715 ~220 Hatcol 3110 #19
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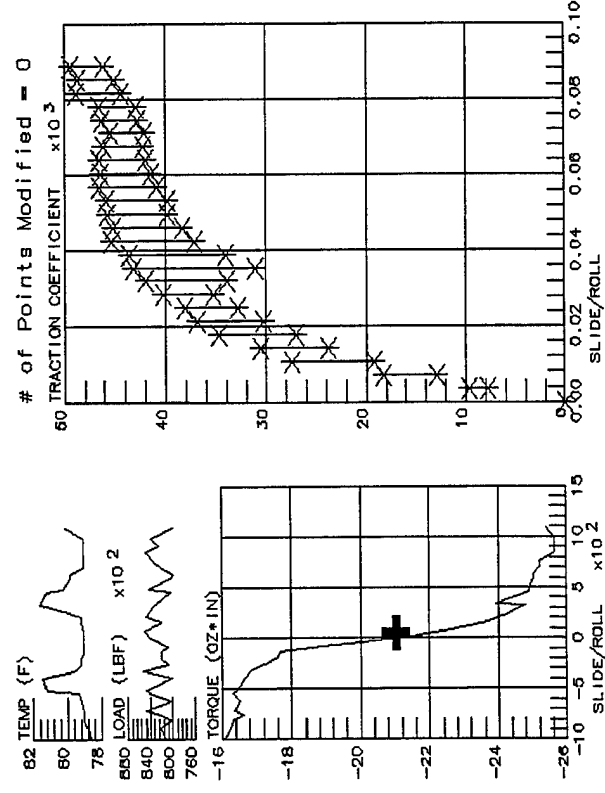
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CO 90-715 ~220 Hatcol 3110 #22
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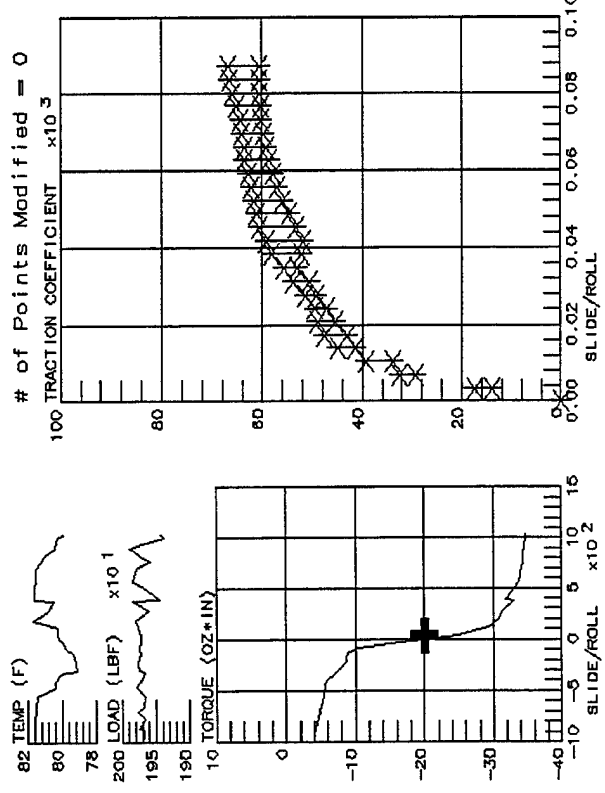
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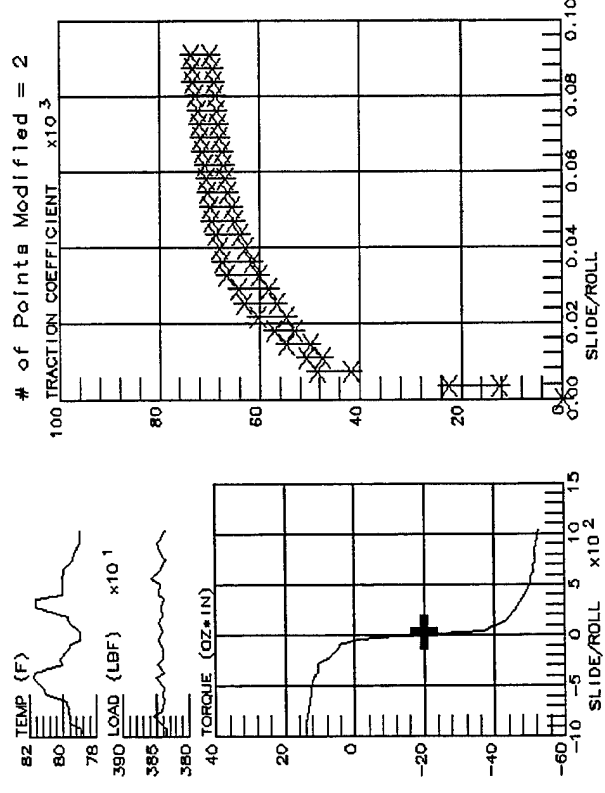
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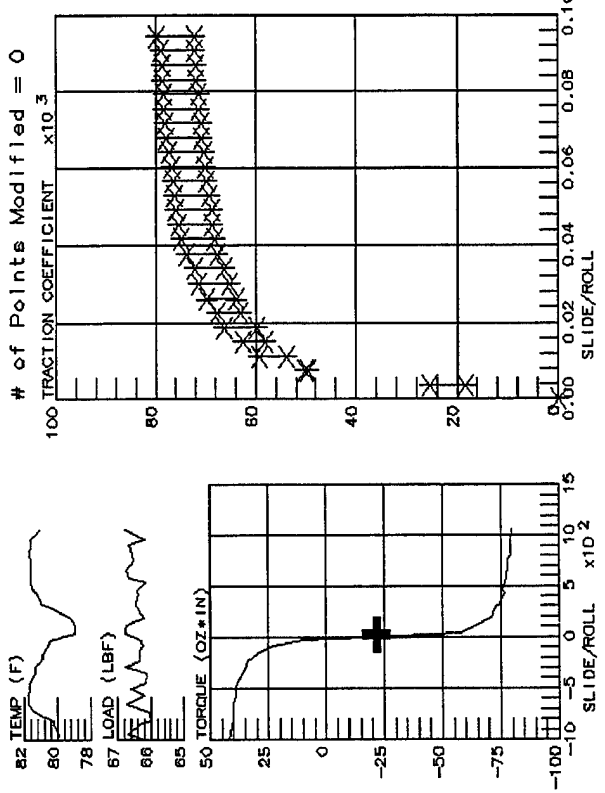
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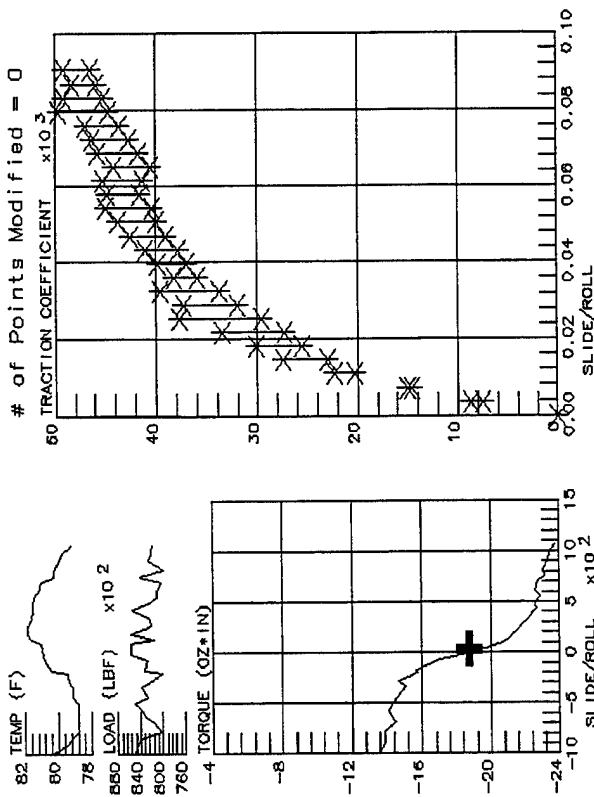


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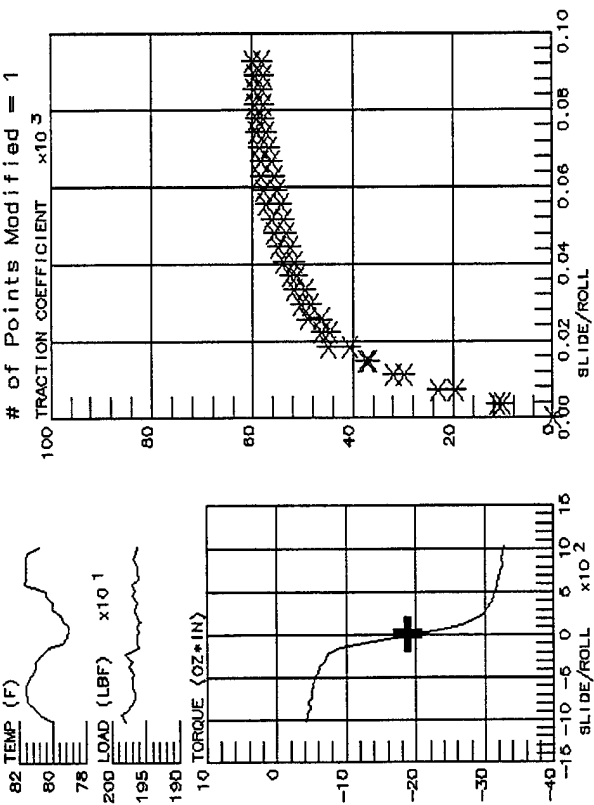
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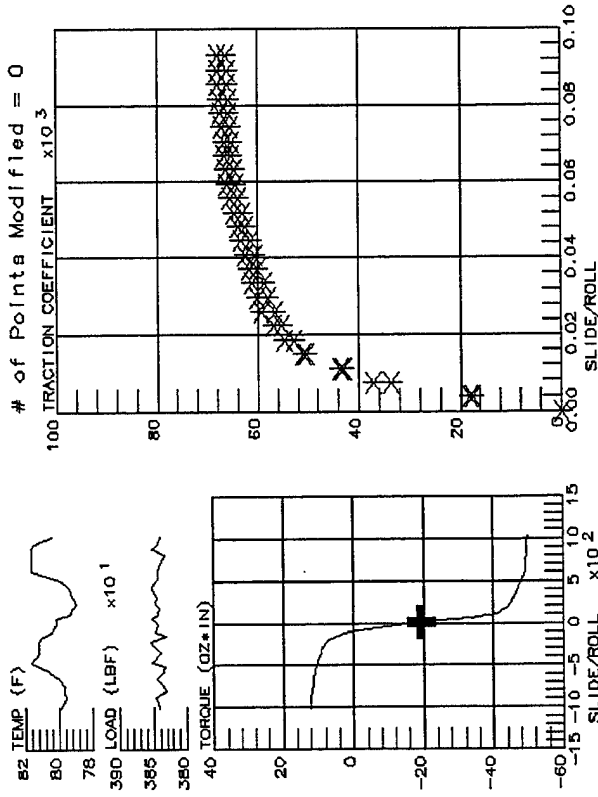
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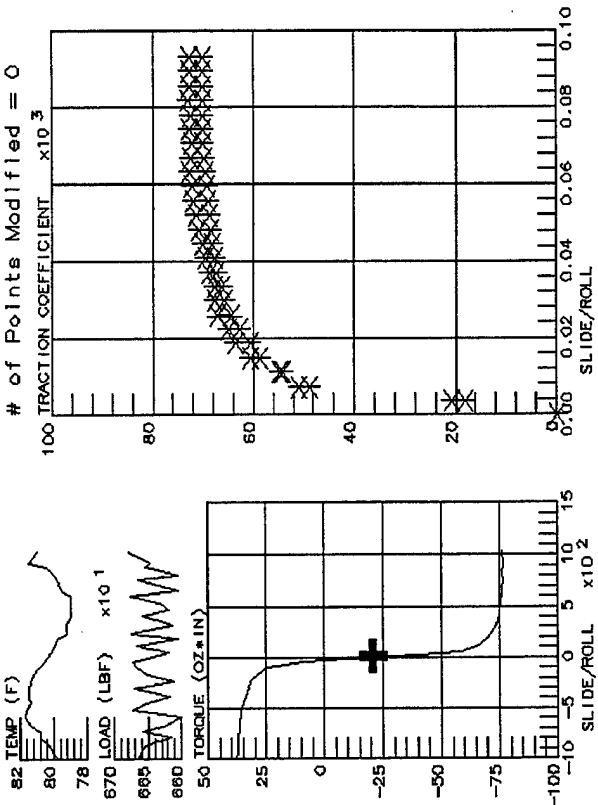
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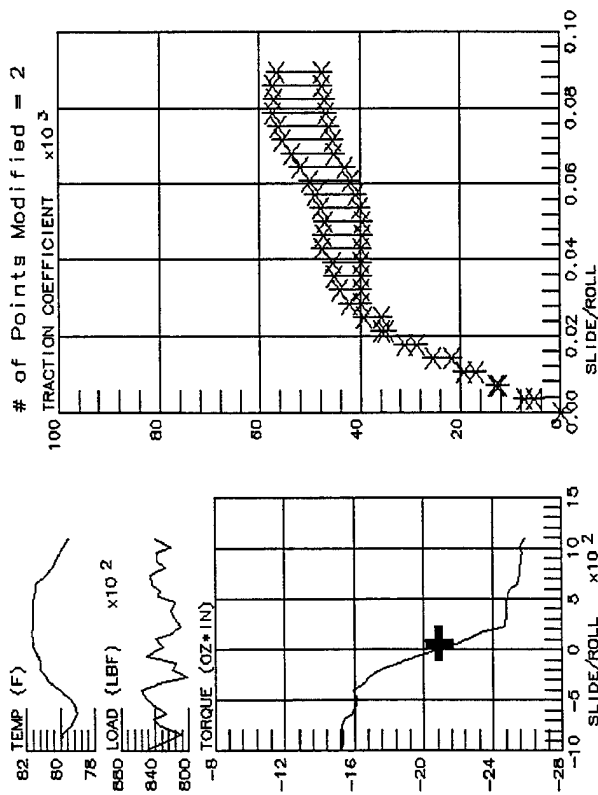


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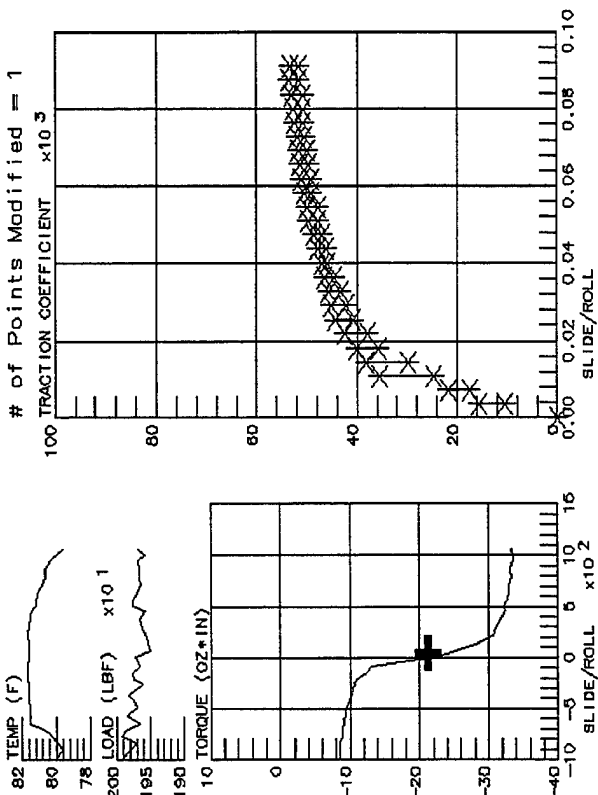
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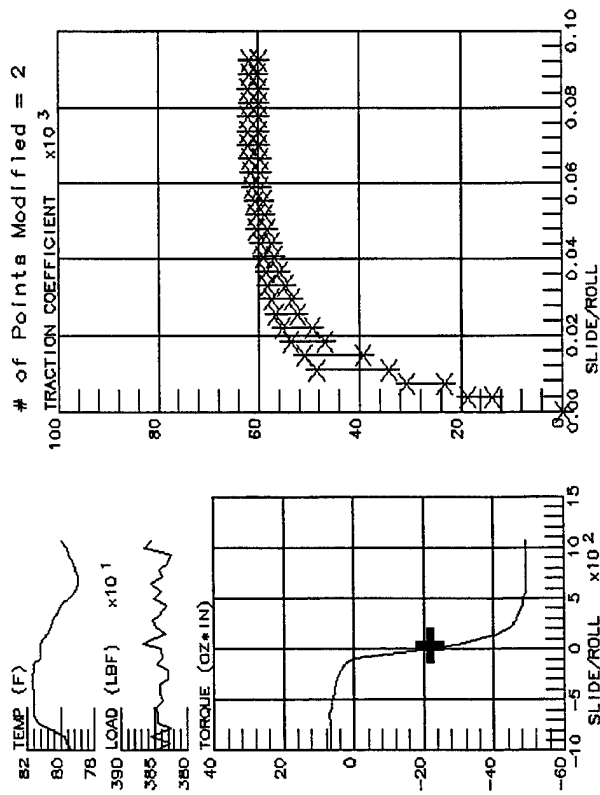
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80F 20LBF 2568RPM 14 FILE: co80med

of Points Modified = 1



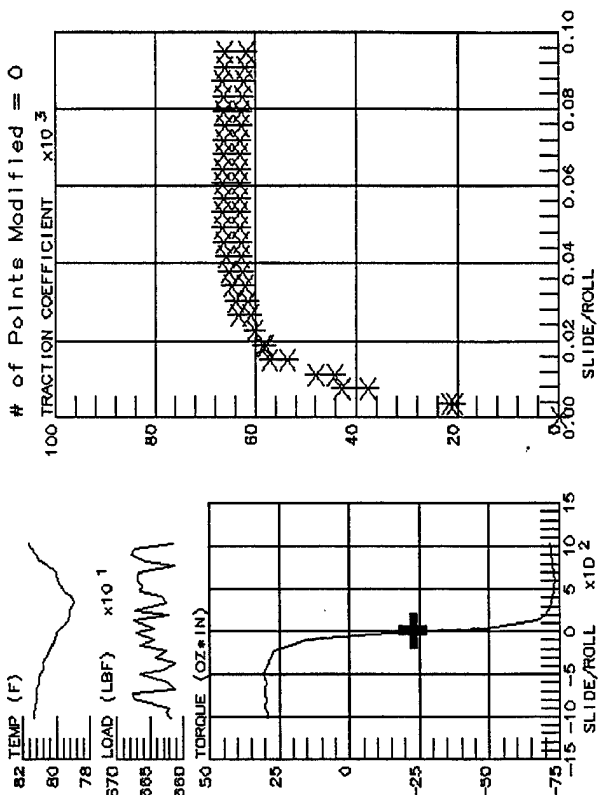
CO 90-715 ~220 Hatcol 3110 #31
80F 38LBF 2568RPM 15 FILE: co80med

of Points Modified = 2

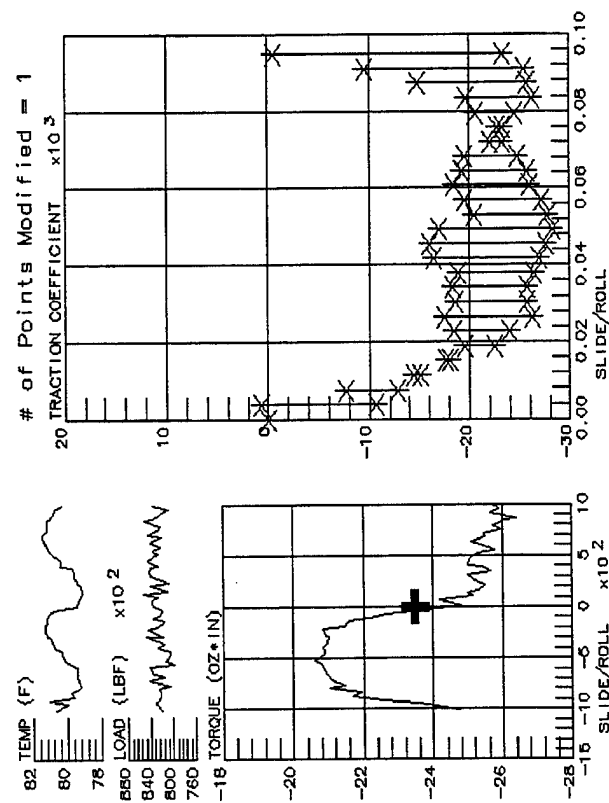


CO 90-715 ~220 Hatcol 3110 #32
80F 66LBF 2568RPM 16 FILE: co80med

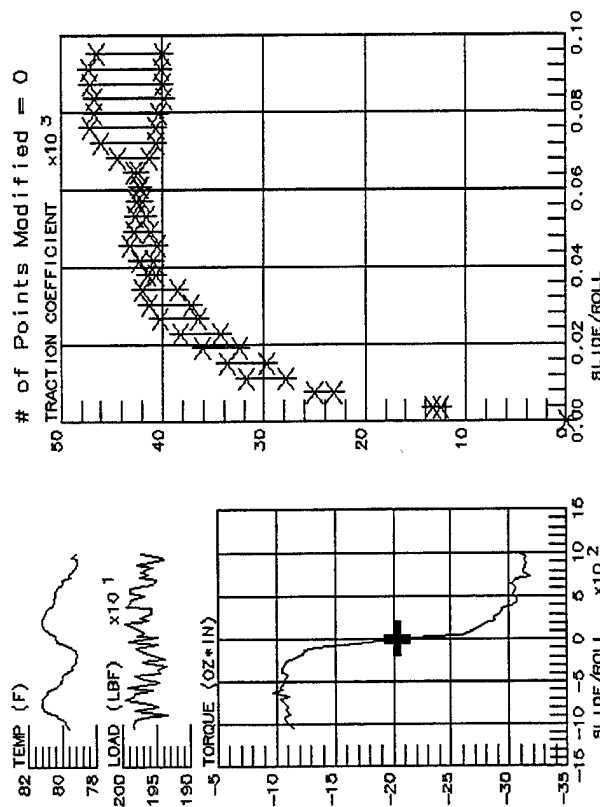
of Points Modified = 0



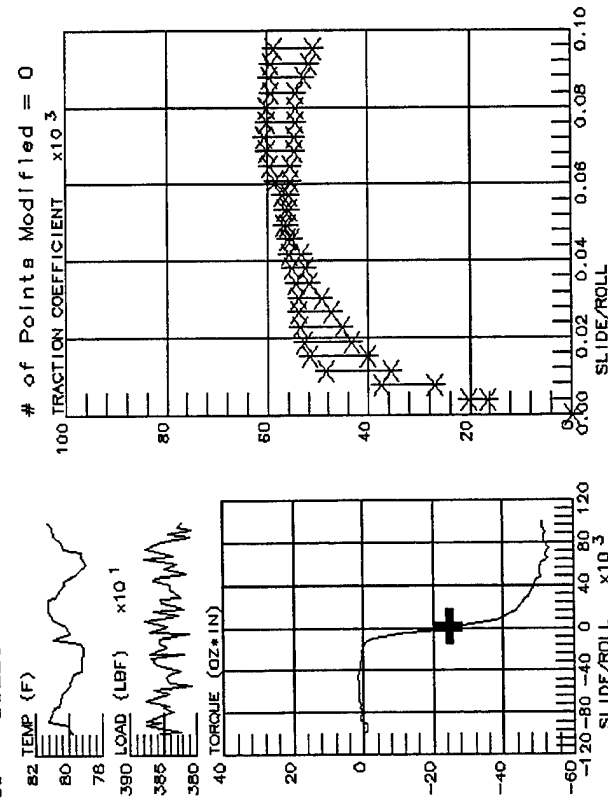
CO 90-715 ~220 Hatcol 3110 #33
80F 8LBF 5097RPM 1 FILE: co80vh



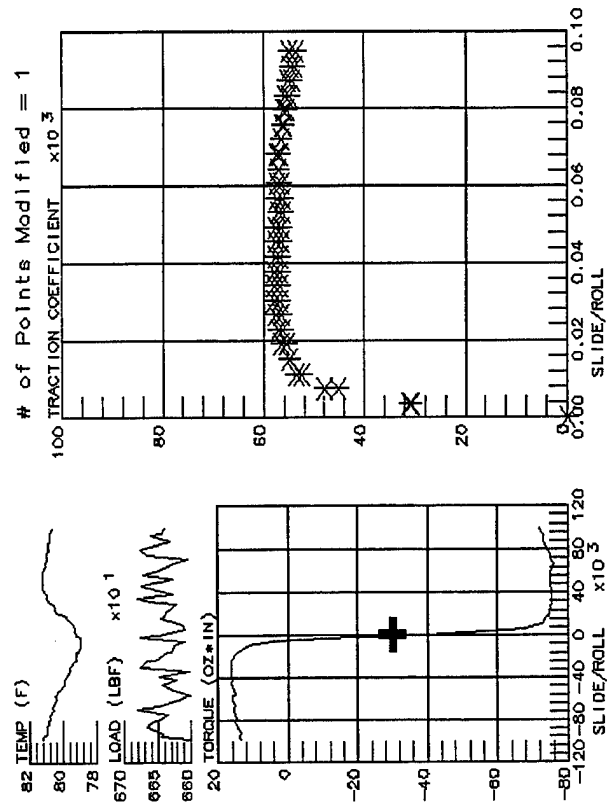
CO 90-715 ~220 Hatcol 3110 #34
80F 20LBF 5097RPM 2 FILE: co80vh



CO 90-715 ~220 Hatcol 3110 #35
80F 38LBF 5097RPM 3 FILE: co80vh

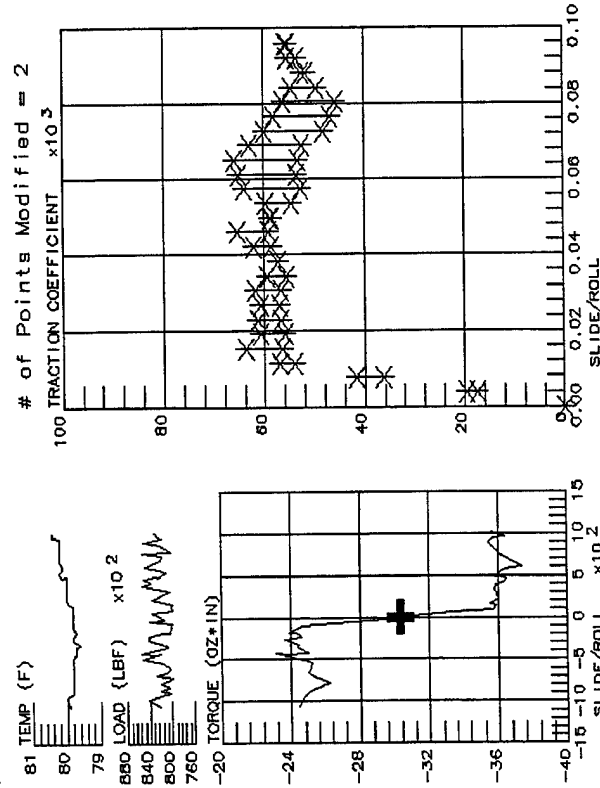


CO 90-715 ~220 Hatcol 3110 #36
80F 86LBF 5097RPM 4 FILE: co80vh

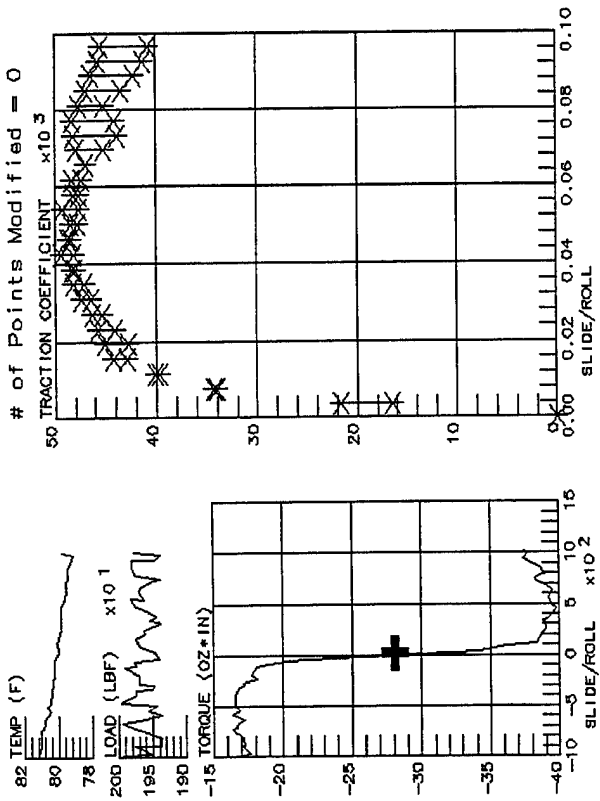


TRACTION MODELS

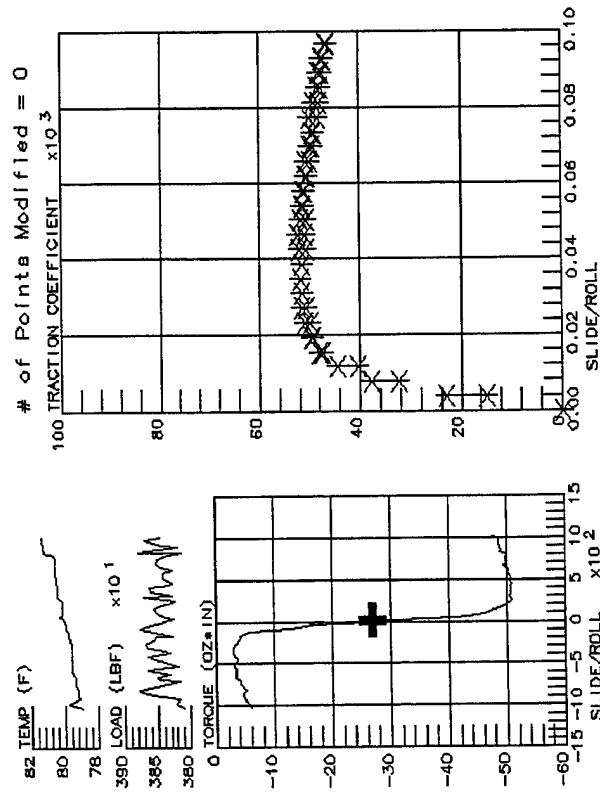
CO 90-715 ~220 Hatcol 3110 #37
80F 8LBF 7665RPM 5 FILE: co80vh



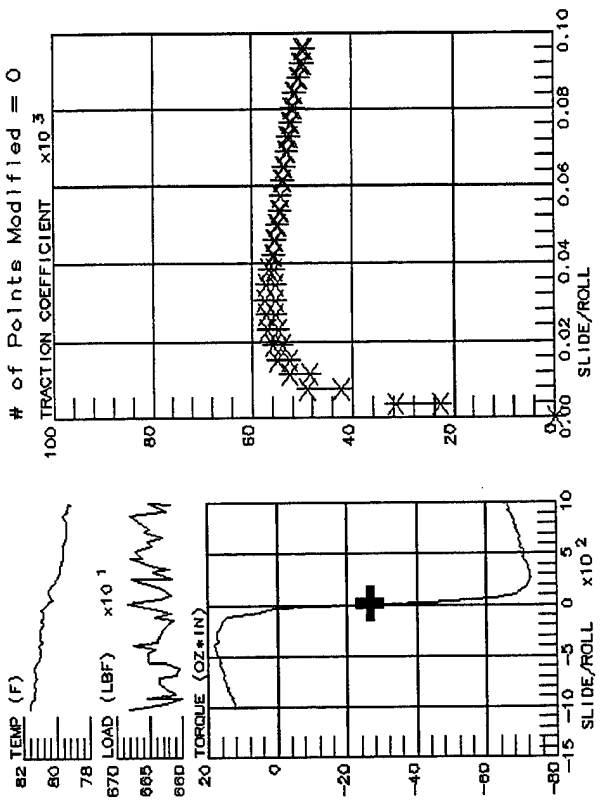
CO 90-715 ~220 Hatcol 3110 #38
80F 20LBF 7665RPM 8 FILE: co80vh



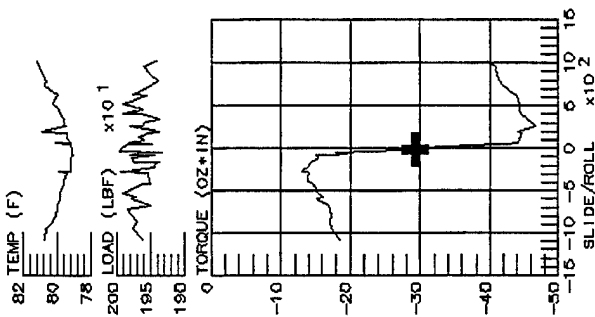
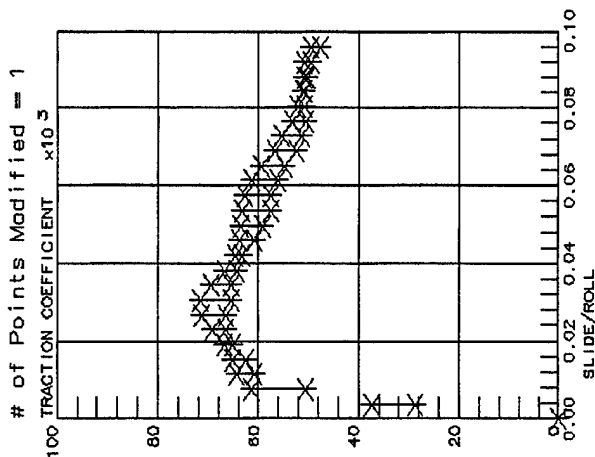
CO 90-715 ~220 Hatcol 3110 #39
80F 38LBF 7665RPM 7 FILE: co80vh



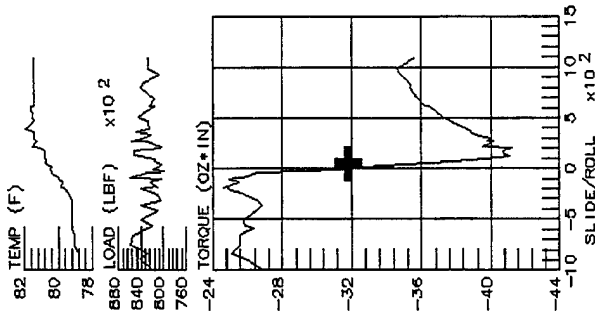
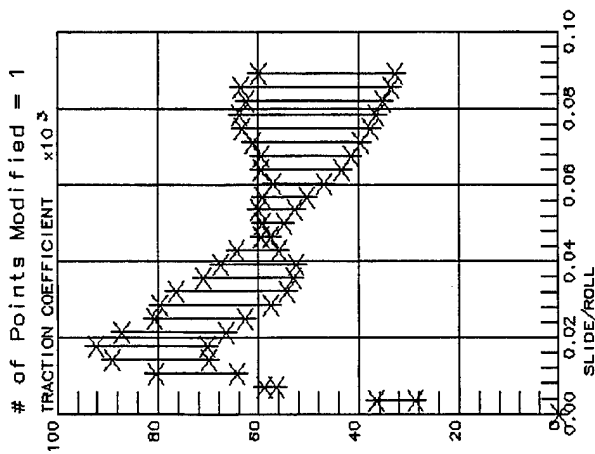
CO 90-715 ~220 Hatcol 3110 #40
80F 66LBF 7665RPM 8 FILE: co80vh



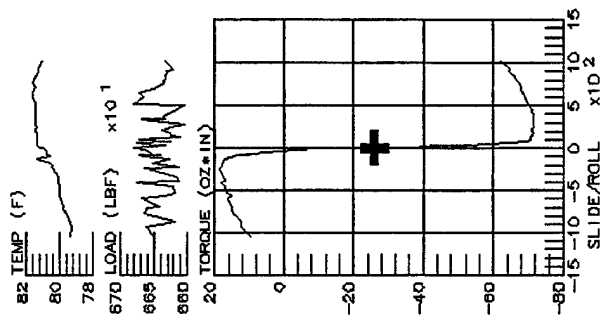
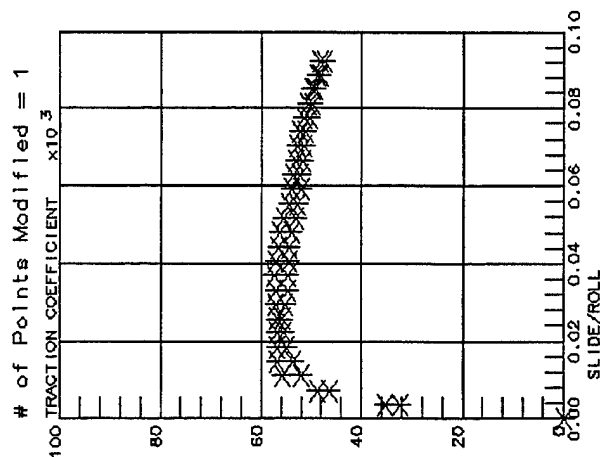
CO 90-715 ~220 Hatcol 3110 #42
80F 20LBF 10225RPM 10 FILE: co80vh



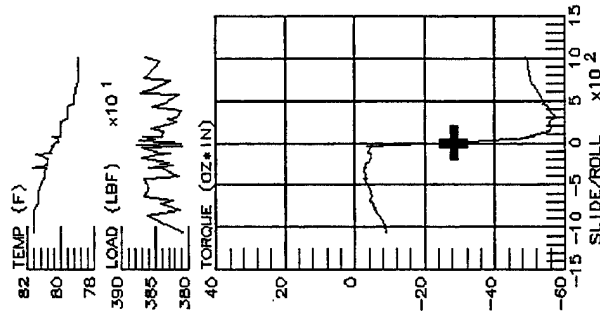
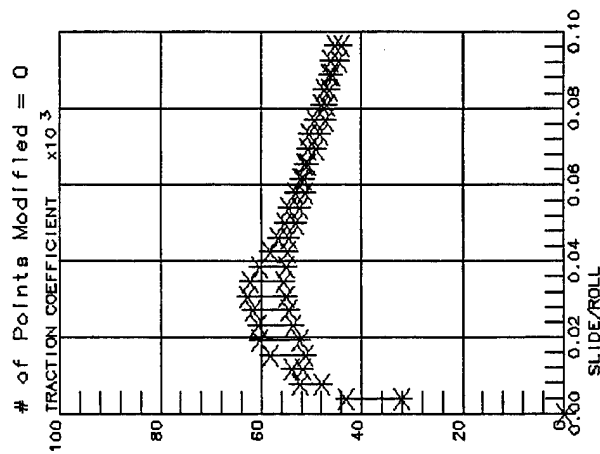
CO 90-715 ~220 Hatcol 3110 #41
80F 8LBF 10225RPM 9 FILE: co80vh



CO 90-715 ~220 Hatcol 3110 #44
80F 86LBF 10225RPM 12 FILE: co80vh

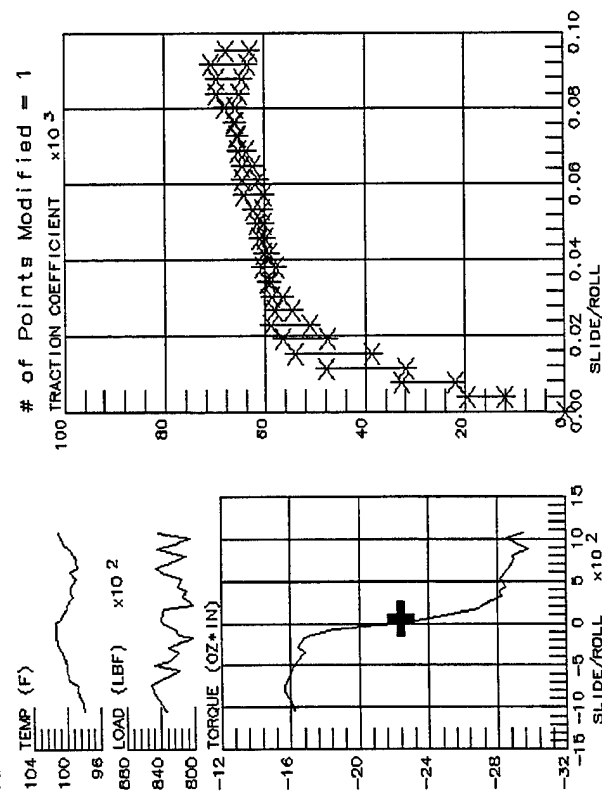


CO 90-715 ~220 Hatcol 3110 #43
80F 36LBF 10225RPM 11 FILE: co80vh



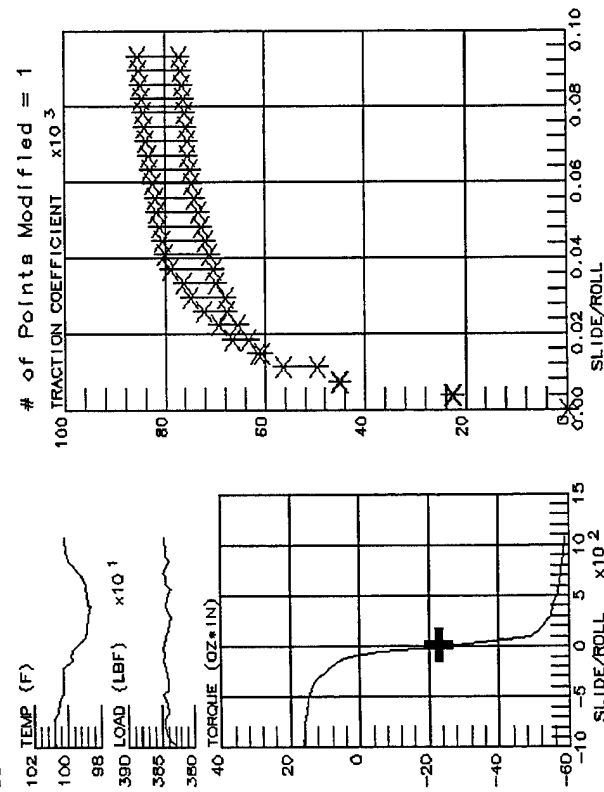
CO 90-715 ~220 Hatool 3110
100F 8LBF 306RPM 1 FILE: co100v1

#45



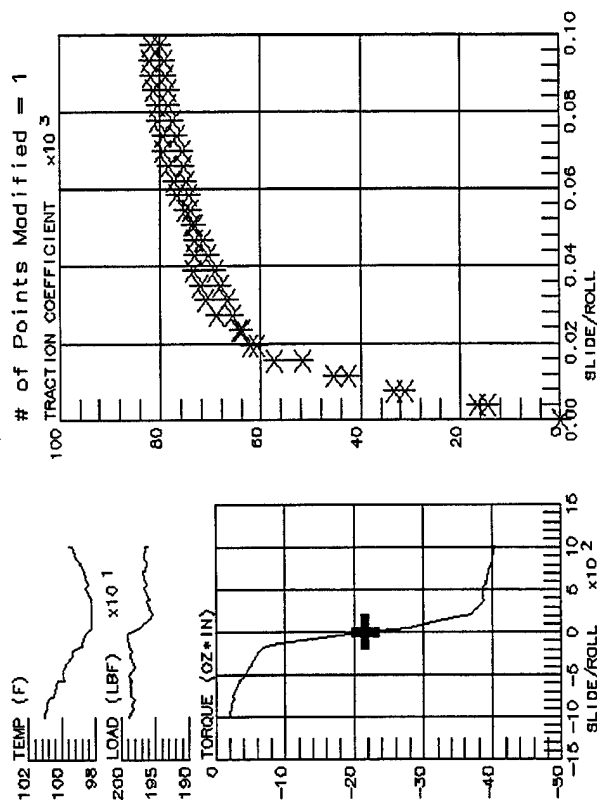
CO 90-715 ~220 Hatool 3110
100F 38LBF 306RPM 3 FILE: co100v1

#47



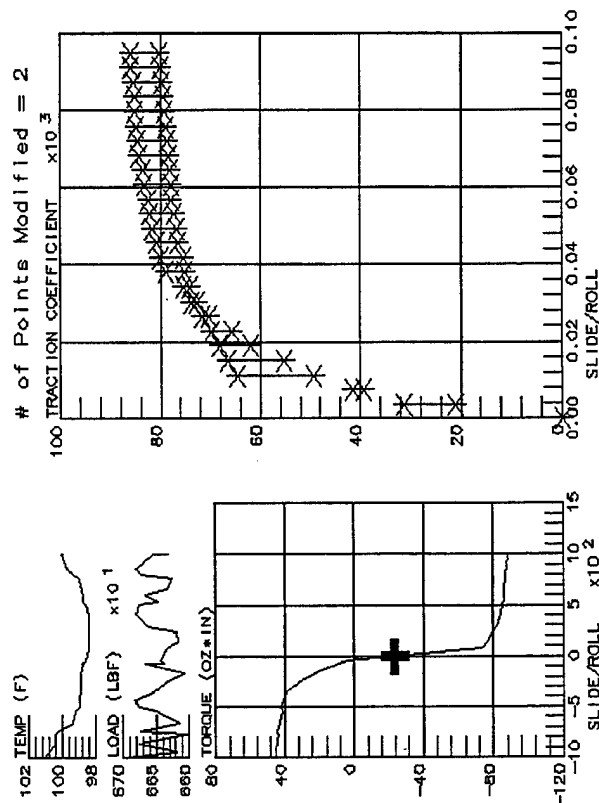
CO 90-715 ~220 Hatool 3110
100F 20LBF 306RPM 2 FILE: co100v1

#46

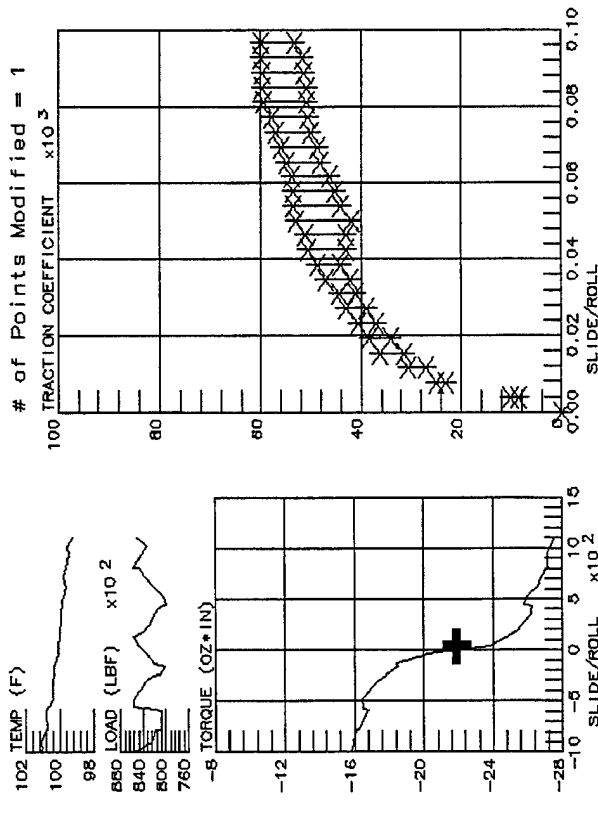


CO 90-715 ~220 Hatool 3110
100F 86LBF 306RPM 4 FILE: co100v1

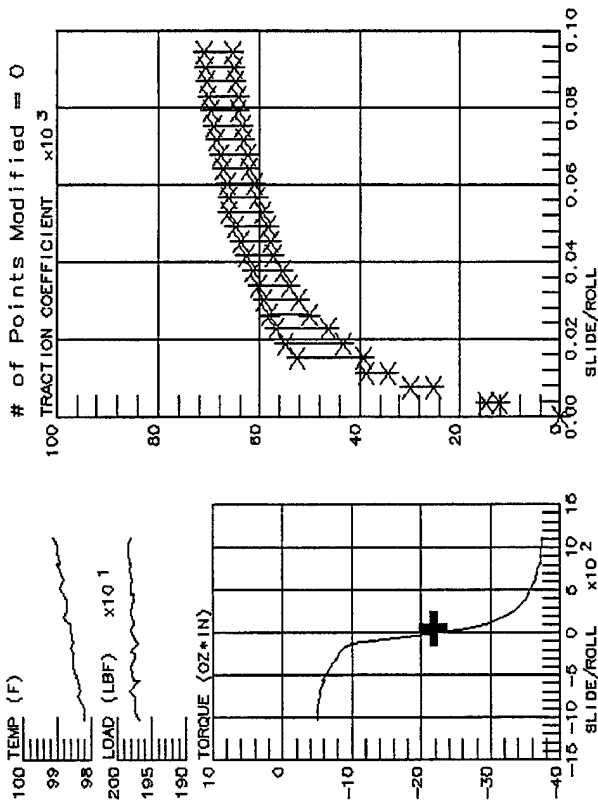
#48



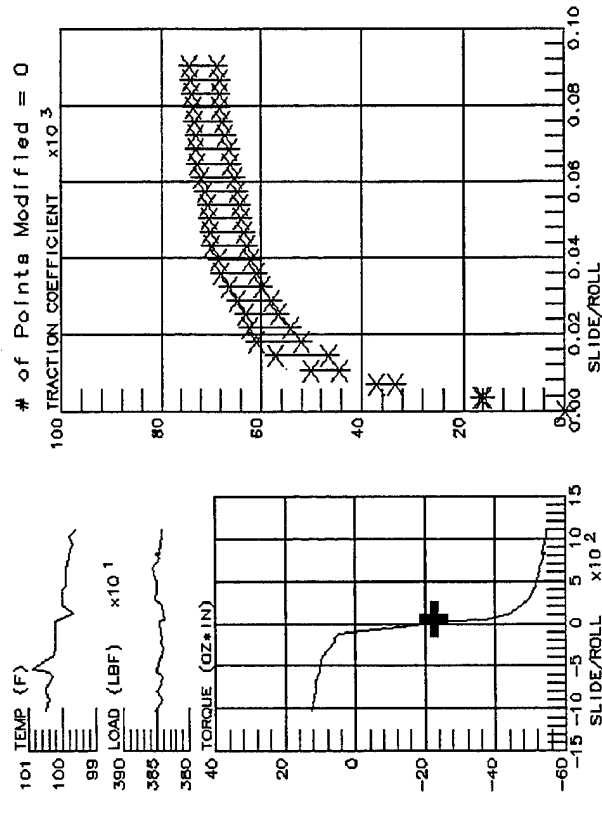
CO 90-715 ~220 Hatcol 3110 #49
100F 8LBF 651RPM 5 FILE: co100v1



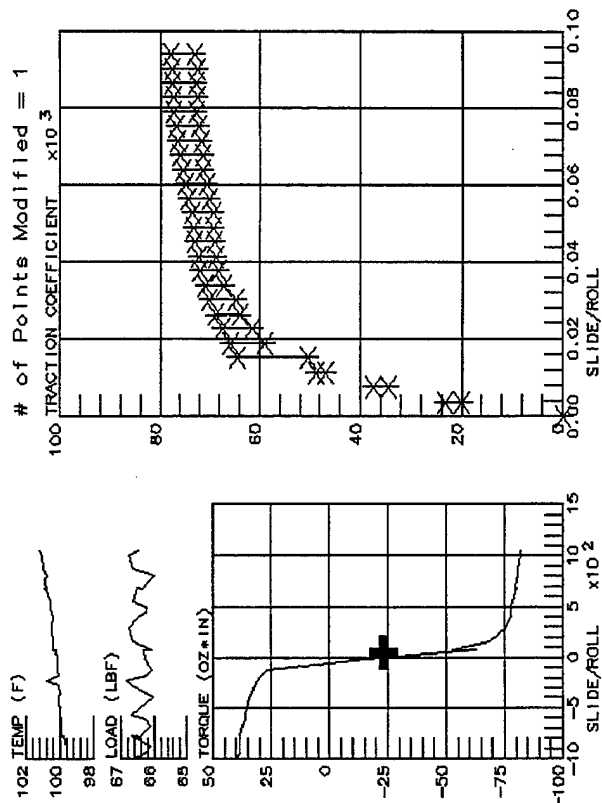
CO 90-715 ~220 Hatcol 3110 #50
100F 20LBF 661RPM 8 FILE: co100v1



CO 90-715 ~220 Hatcol 3110 #51
100F 38LBF 651RPM 7 FILE: co100v1

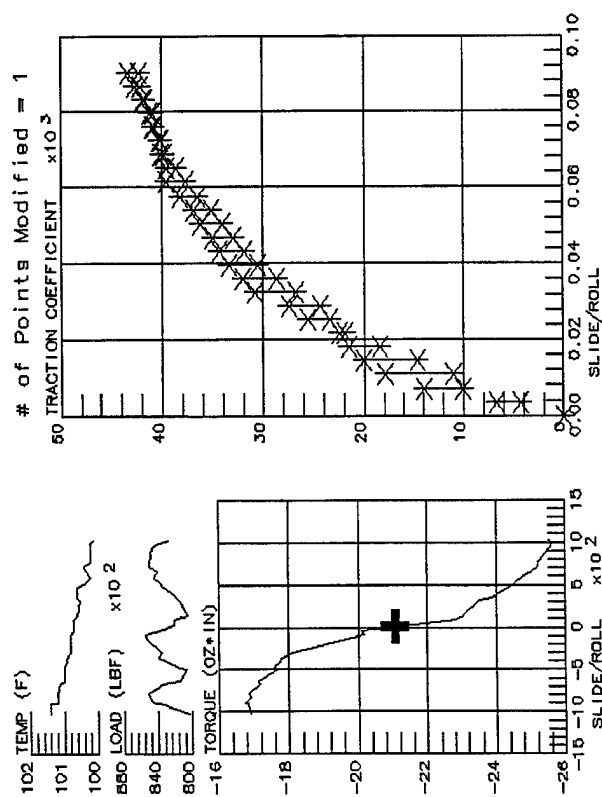


CO 90-715 ~220 Hatcol 3110 #52
100F 86LBF 651RPM 8 FILE: co100v1



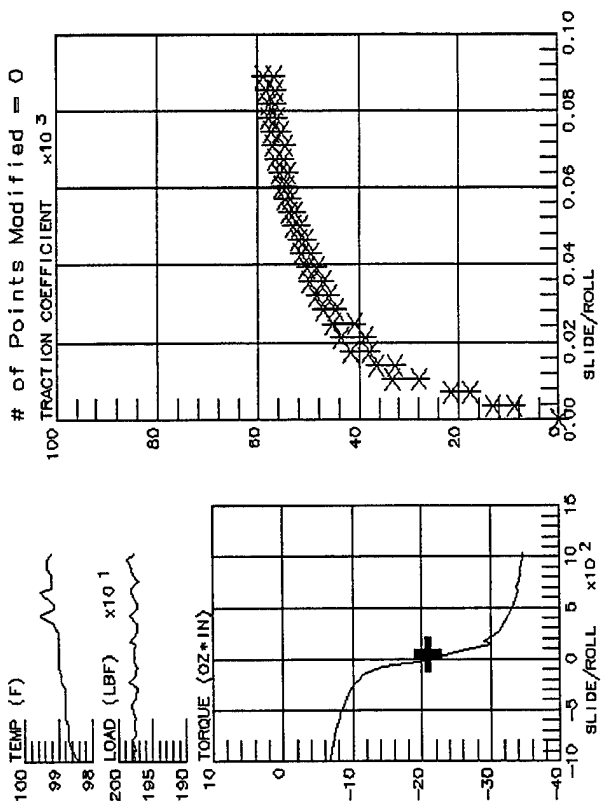
CO 90-715 ~220 Hatool 3110 #53
100F 8LBF 1264RPM 9 FILE: co100v1

of Points Modified = 1



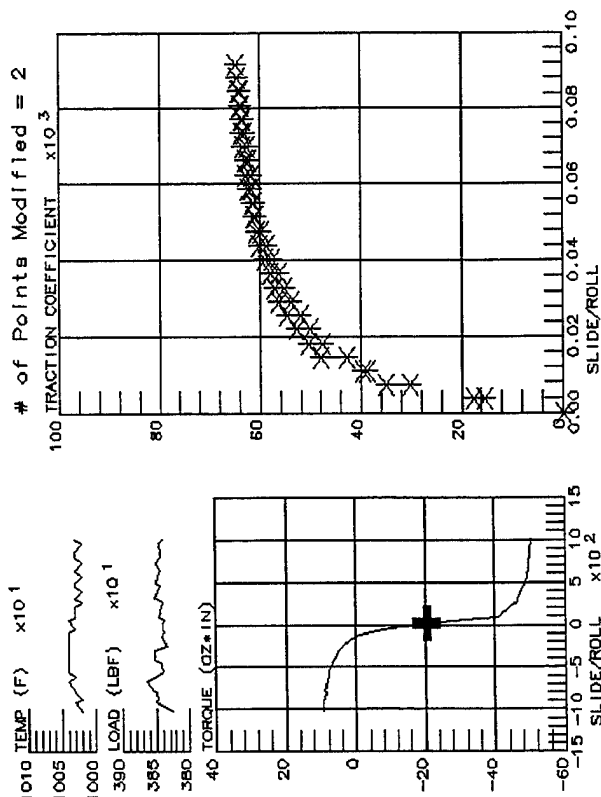
CO 90-715 ~220 Hatool 3110 #54
100F 20LBF 1264RPM 10 FILE: co100v1

of Points Modified = 0



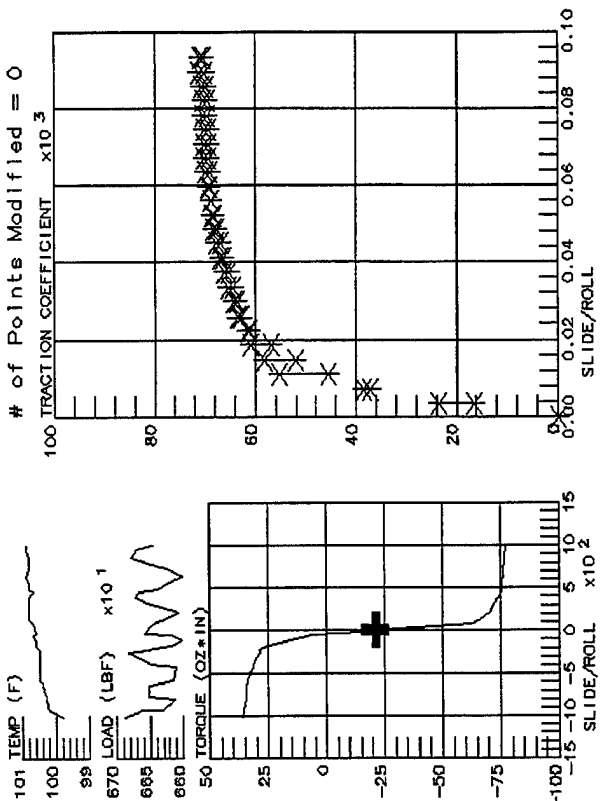
CO 90-715 ~220 Hatool 3110 #55
100F 38LBF 1264RPM 11 FILE: co100v1

of Points Modified = 2

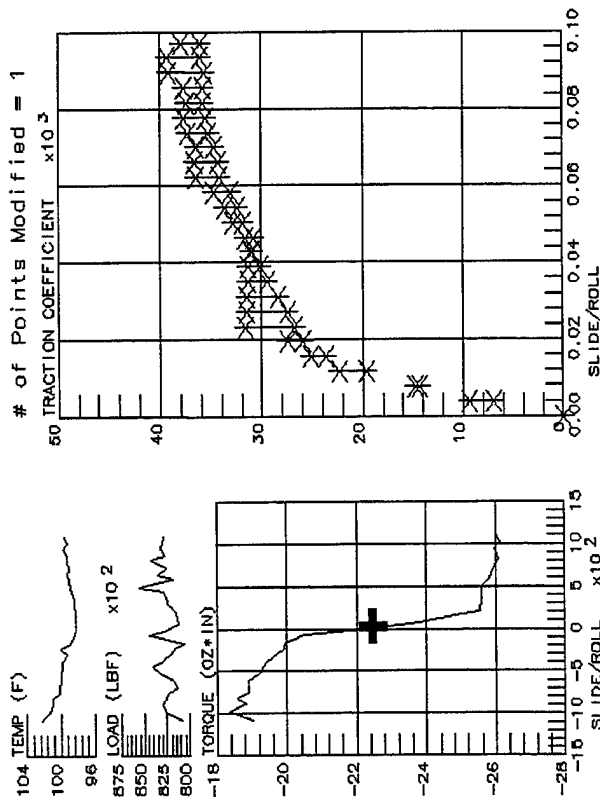


CO 90-715 ~220 Hatool 3110 #56
100F 66LBF 1264RPM 12 FILE: co100v1

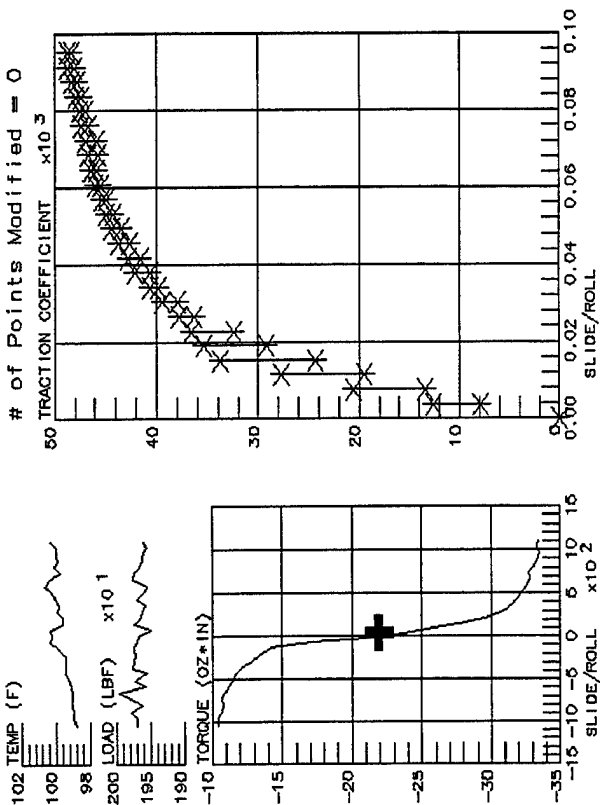
of Points Modified = 0



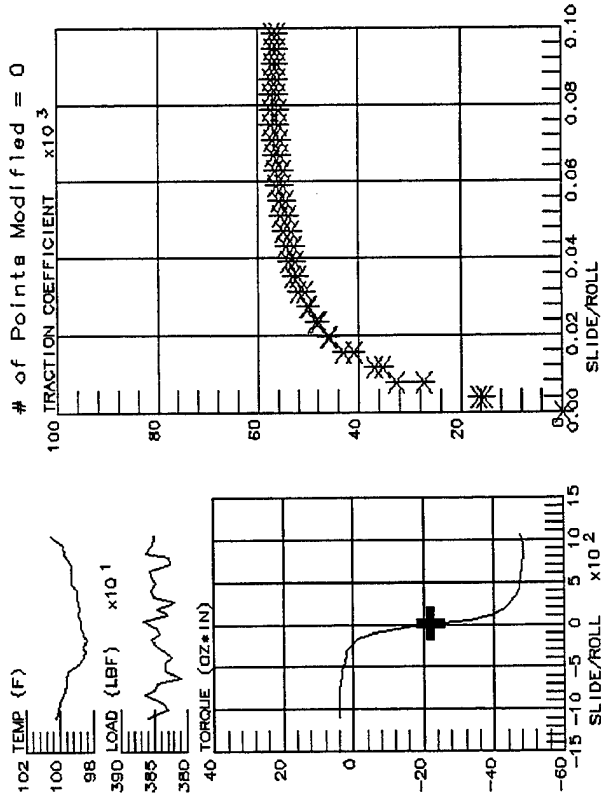
CO 90-715 ~220 Hatcol 3110 #57
100F 8LBF 306RPM 1 FILE: co100v1x



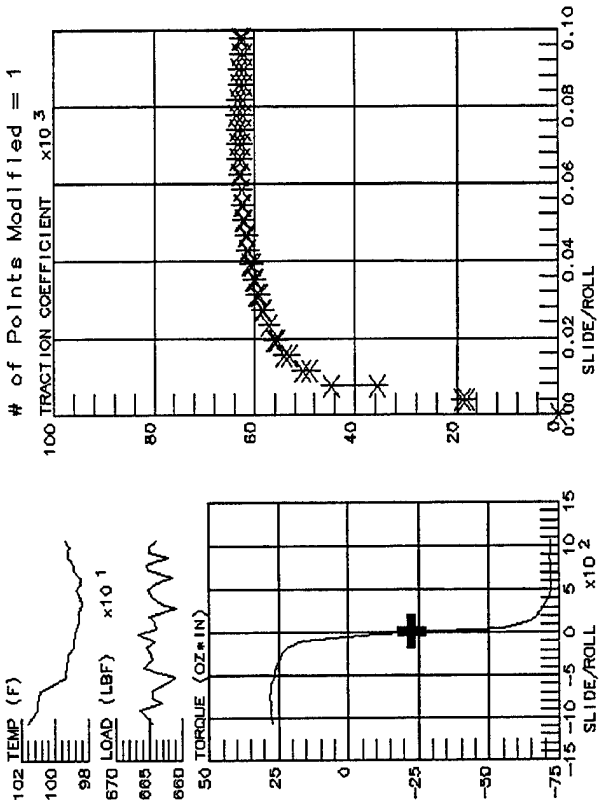
CO 90-715 ~220 Hatcol 3110 #58
100F 20LBF 2535RPM 14 FILE: co100v1x



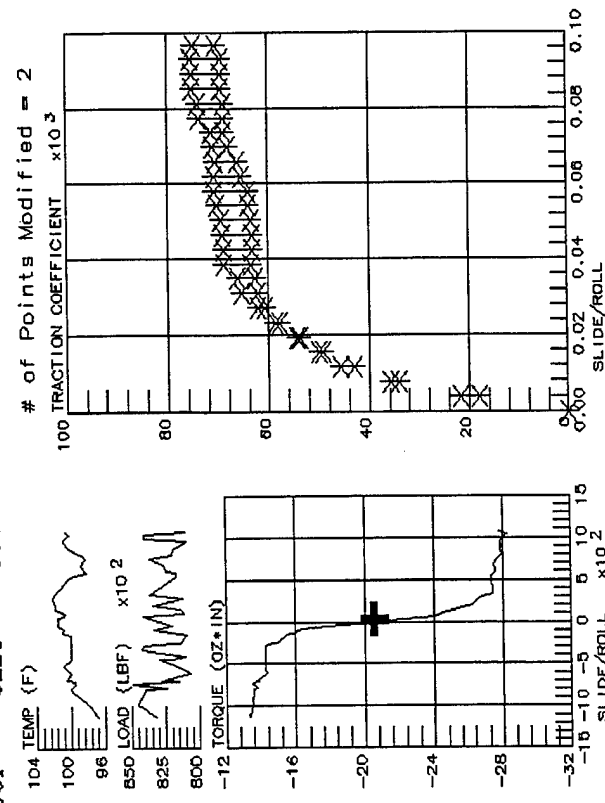
CO 90-715 ~220 Hatcol 3110 #59
100F 38LBF 2535RPM 15 FILE: co100v1x



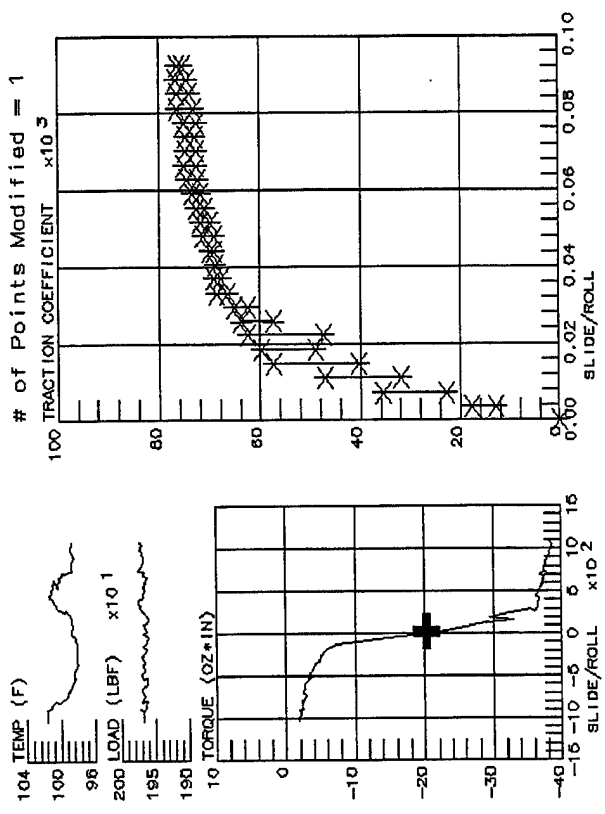
CO 90-715 ~220 Hatcol 3110 #60
100F 66LBF 2535RPM 16 FILE: co100v1x



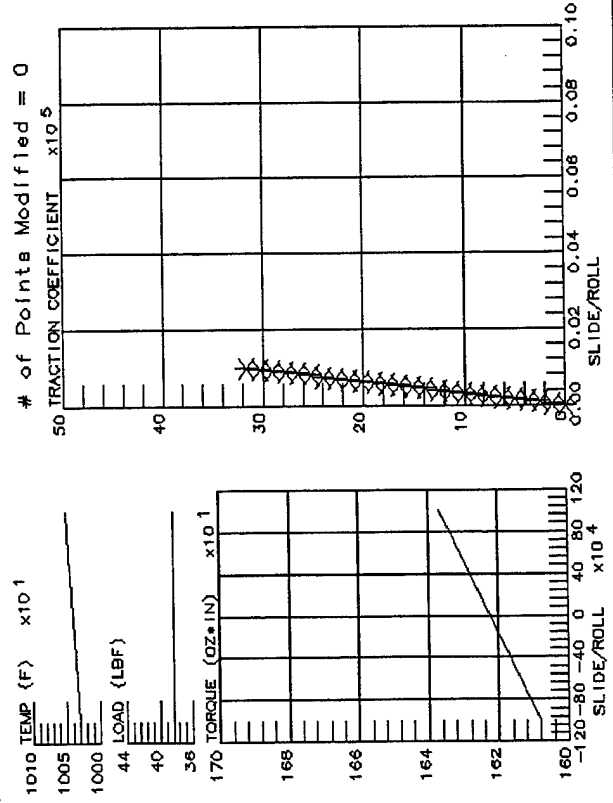
CO 90-715 ~220 Hatcol 3110 #61
100F 8LBF 306RPM 1 FILE: co100med



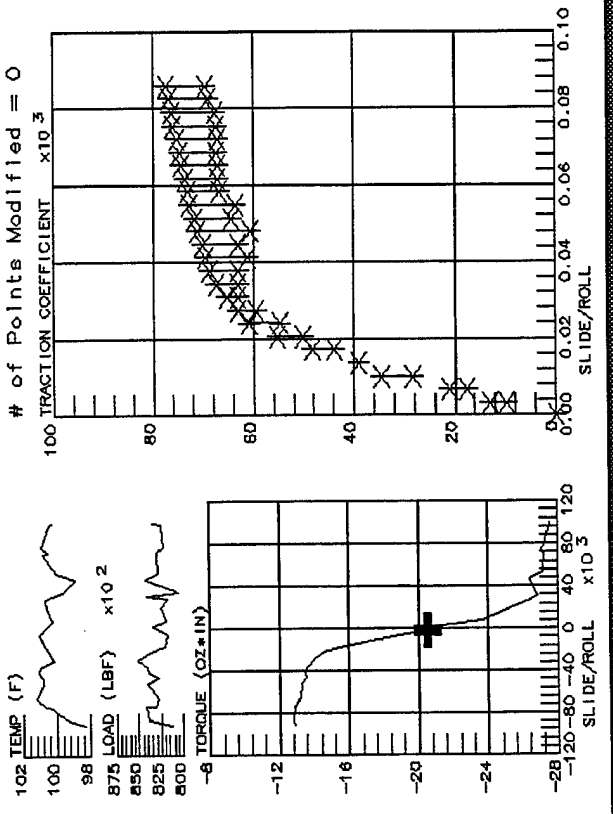
CO 90-715 ~220 Hatcol 3110 #62
100F 20LBF 306RPM 2 FILE: co100med



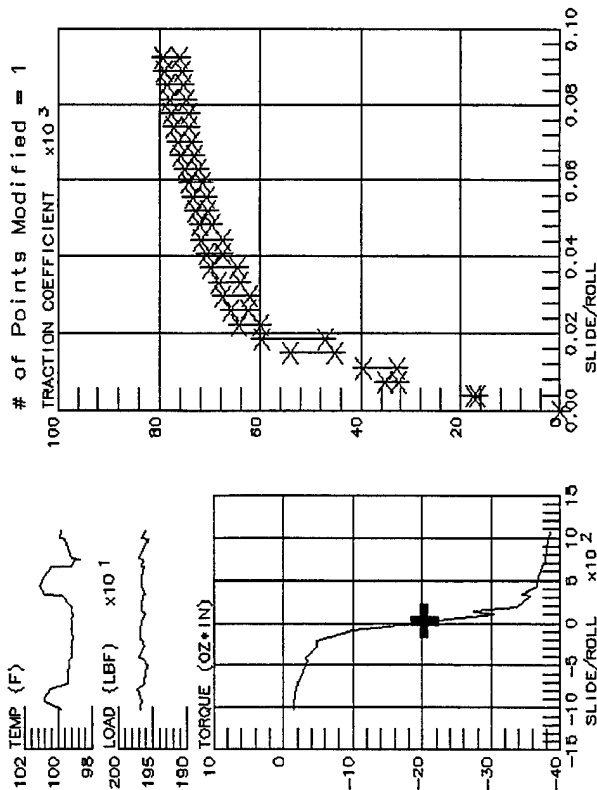
CO 90-715 ~220 Hatcol 3110 #63
100F 38LBF 306RPM 3 FILE: co100med



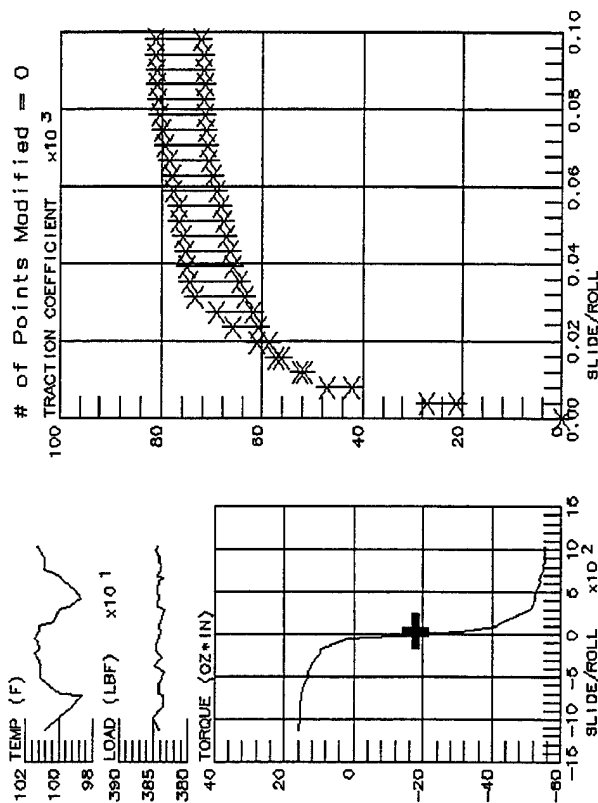
CO 90-715 ~220 Hatcol 3110 #64
100F 8LBF 306RPM 1 FILE: co100med



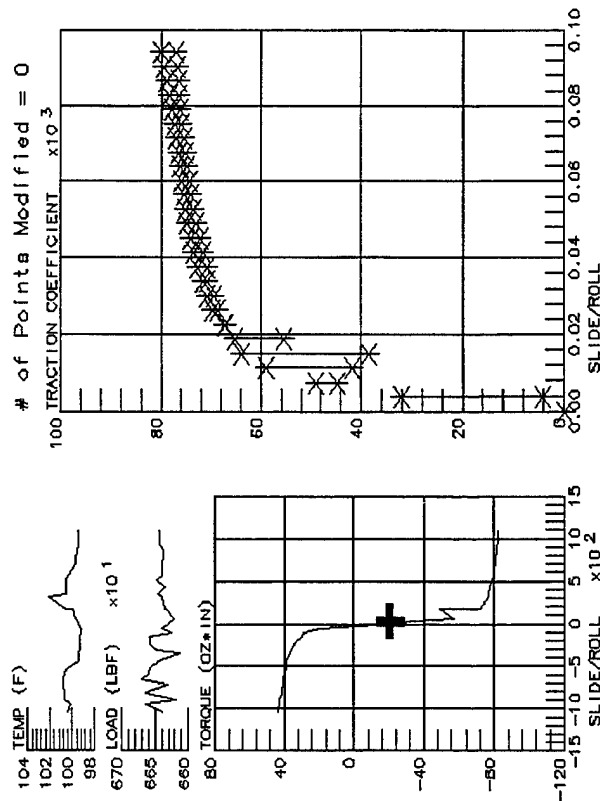
CO 90-715 ~220 Hatcol 3110 #65
100F 20LBF 306RPM 2 FILE: co100mex



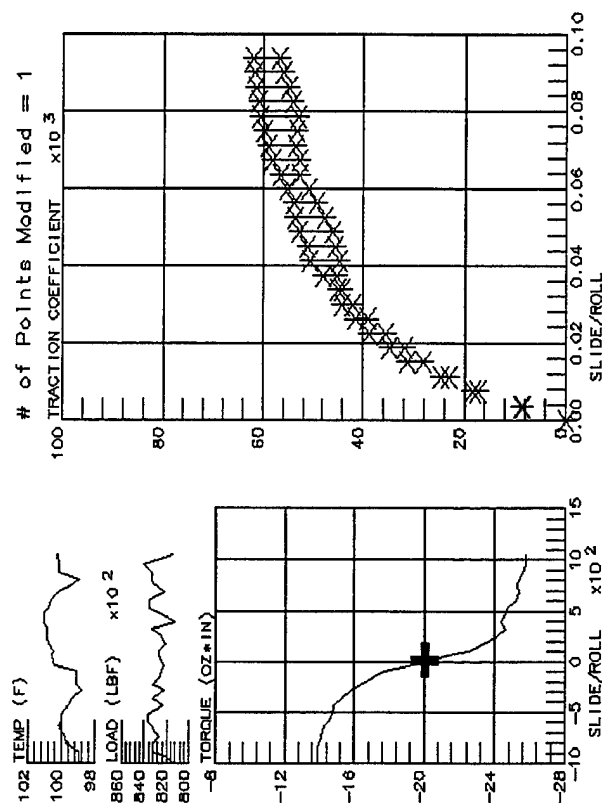
CO 90-715 ~220 Hatcol 3110 #66
100F 38LBF 306RPM 3 FILE: co100mex



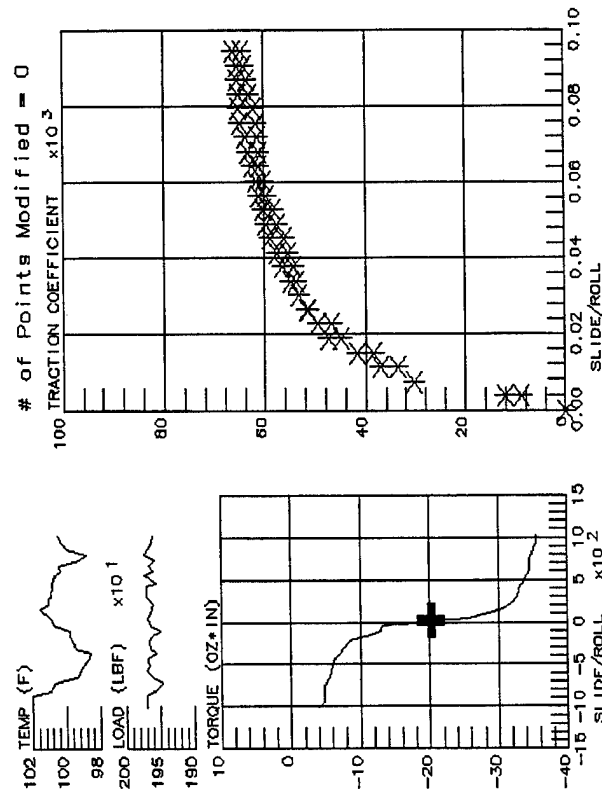
CO 90-715 ~220 Hatcol 3110 #67
100F 66LBF 306RPM 4 FILE: co100mex



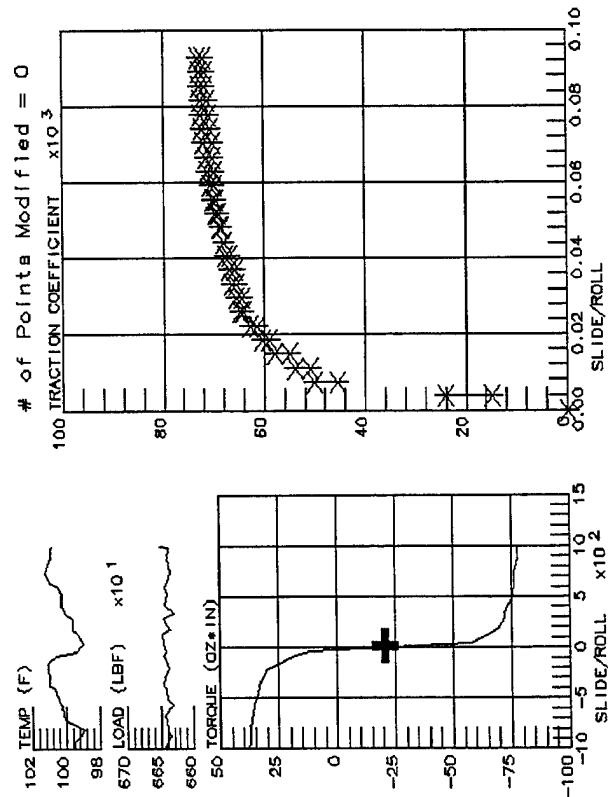
CO 90-715 ~220 Hatcol 3110 #68
100F 86LBF 651RPM 5 FILE: co100mex



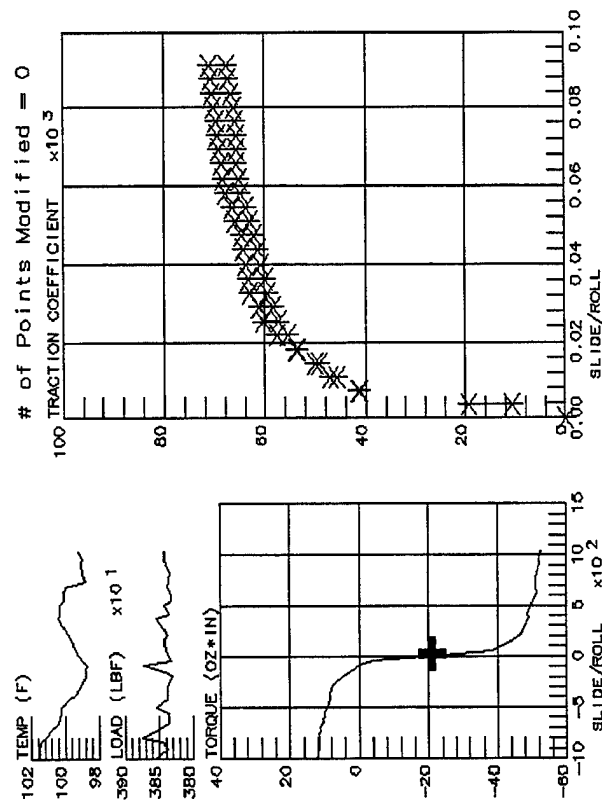
CO 90-715 ~220 Hatcol 3110 #69
100F 20LBF 651RPM 8 FILE: co100mex



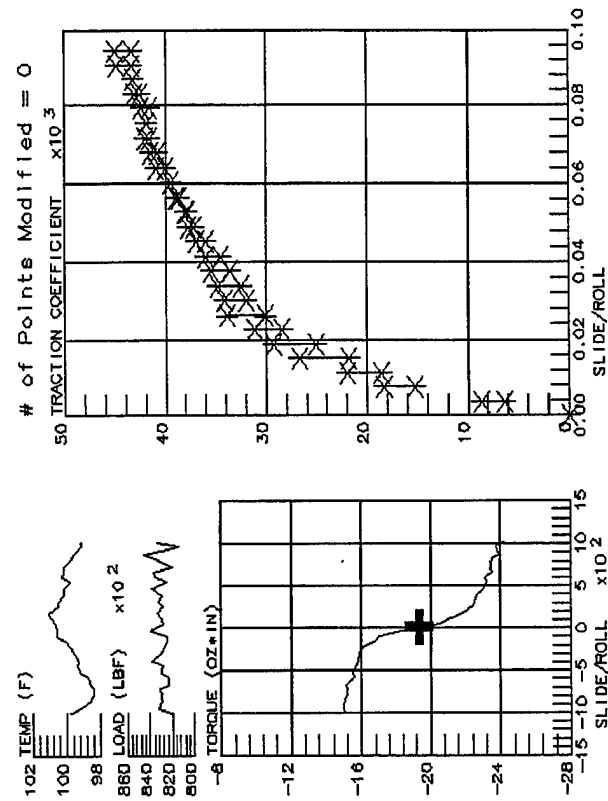
CO 90-715 ~220 Hatcol 3110 #71
100F 66LBF 651RPM 8 FILE: co100mex



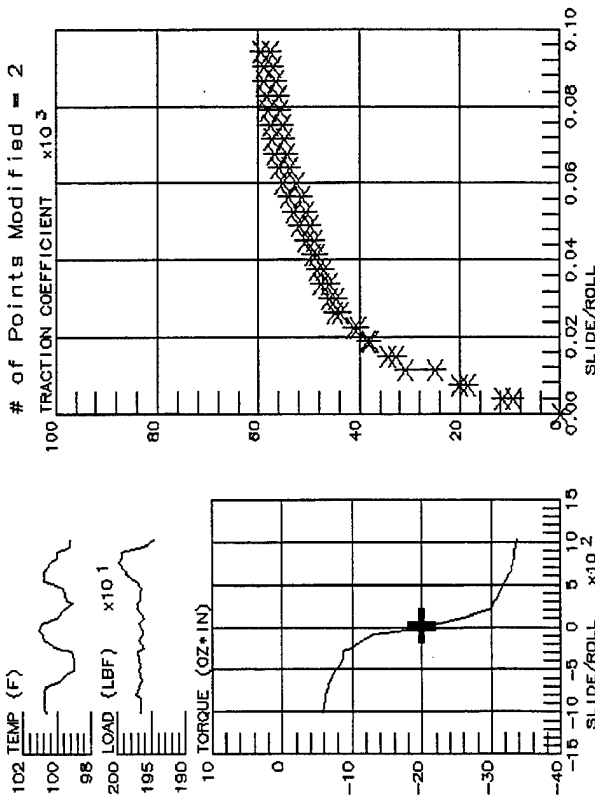
CO 90-715 ~220 Hatcol 3110 #70
100F 38LBF 661RPM 7 FILE: co100mex



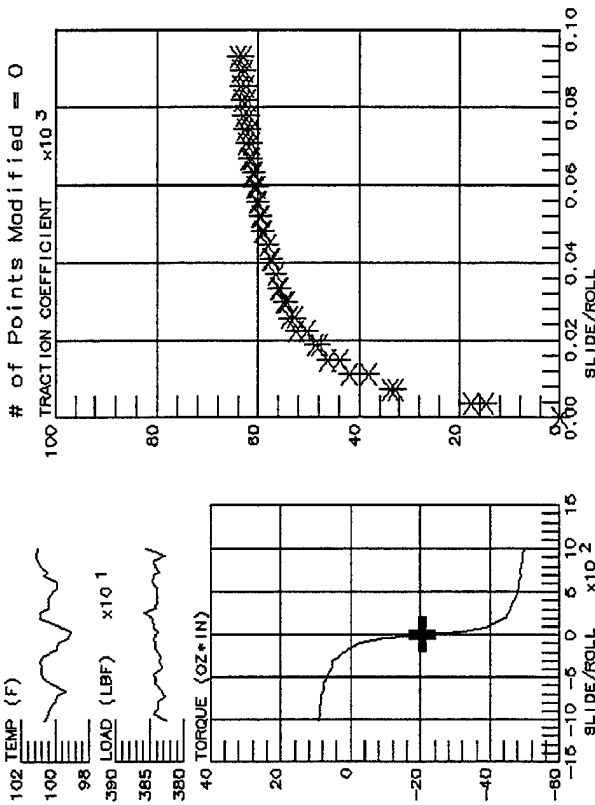
CO 90-715 ~220 Hatcol 3110 #72
100F 8LBF 1284RPM 9 FILE: co100mex



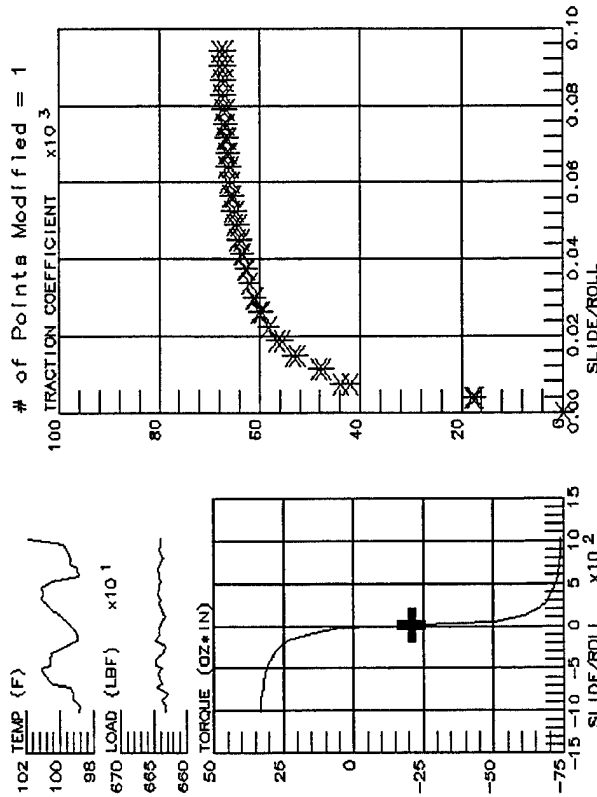
CO 90-715 ~220 Hatcol 3110 #73
100F 20LBF 1264RPM 10 FILE: co100mex



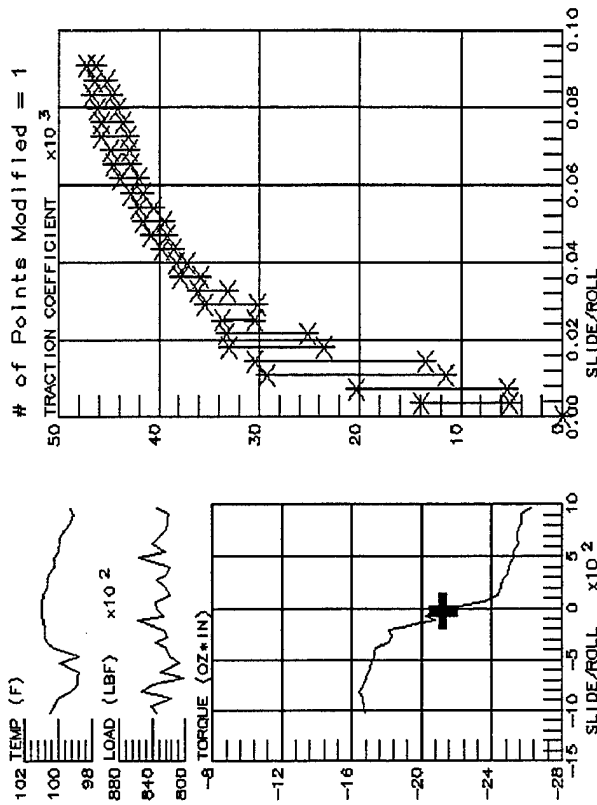
CO 90-715 ~220 Hatcol 3110 #74
100F 38LBF 1264RPM 11 FILE: co100mex



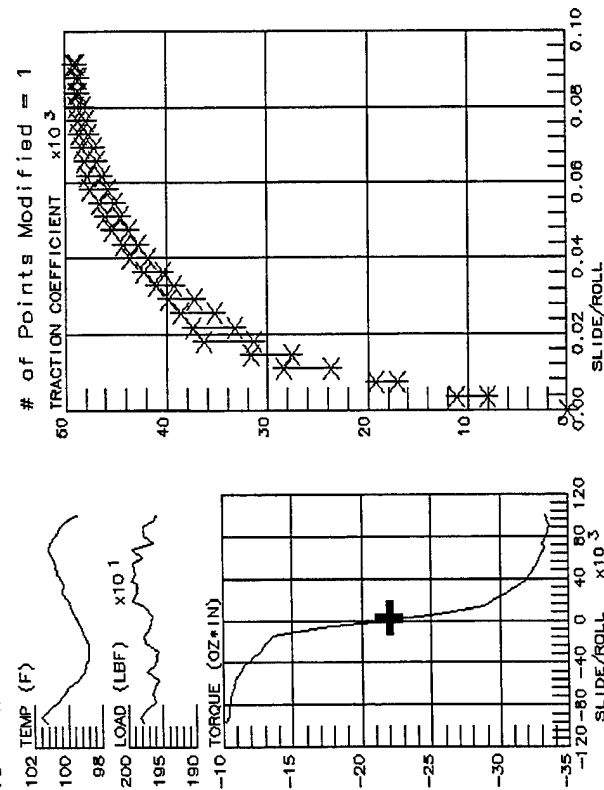
CO 90-715 ~220 Hatcol 3110 #75
100F 66LBF 1264RPM 12 FILE: co100mex



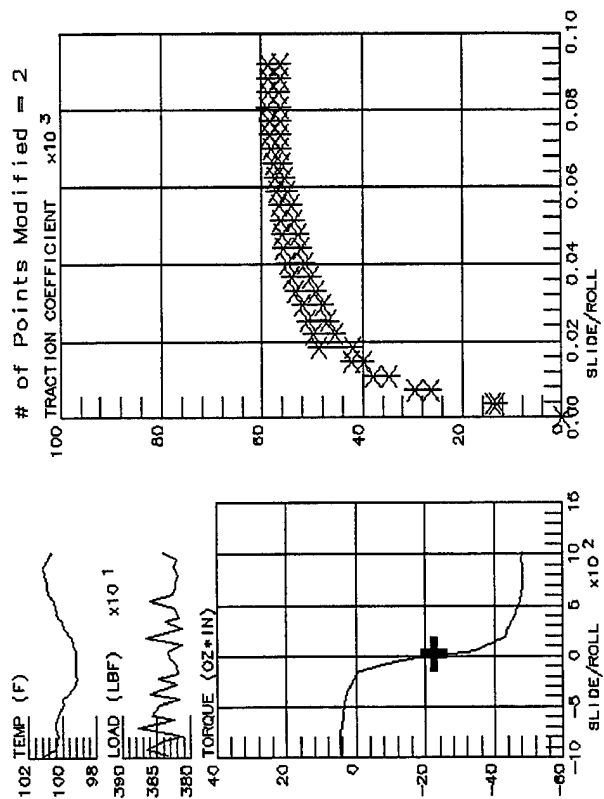
CO 90-715 ~220 Hatcol 3110 #76
100F 8LBF 2563RPM 13 FILE: co100mex



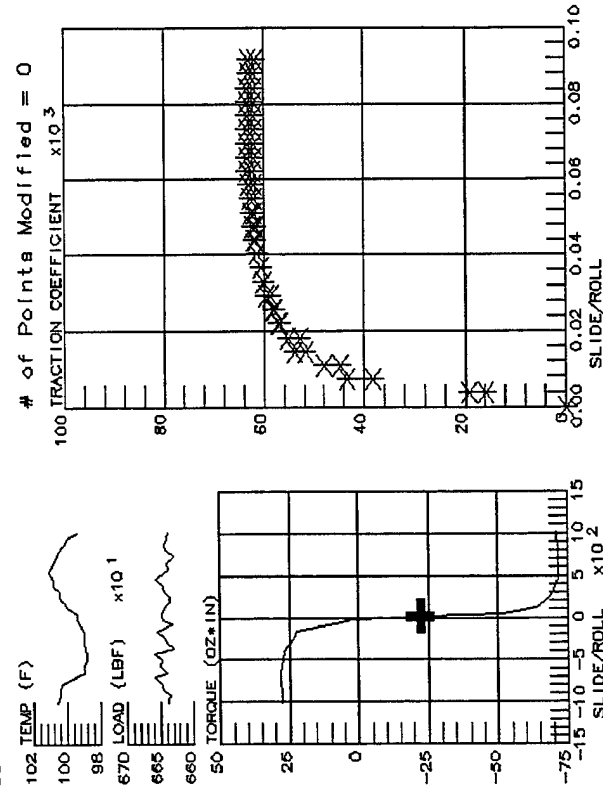
CO 90-715 ~220 Hatcol 3110 #77
100F 20LBF 2563RPM 14 FILE: co100mex



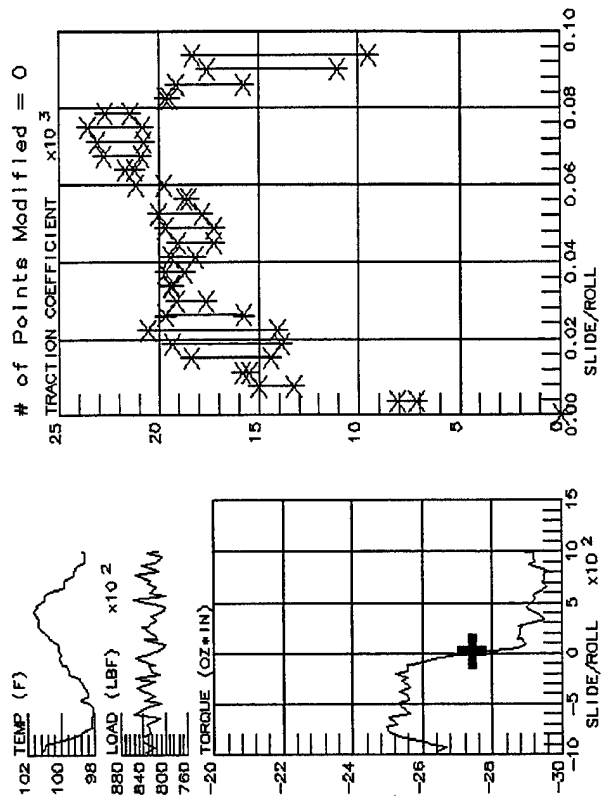
CO 90-715 ~220 Hatcol 3110 #78
100F 38LBF 2563RPM 15 FILE: co100mex



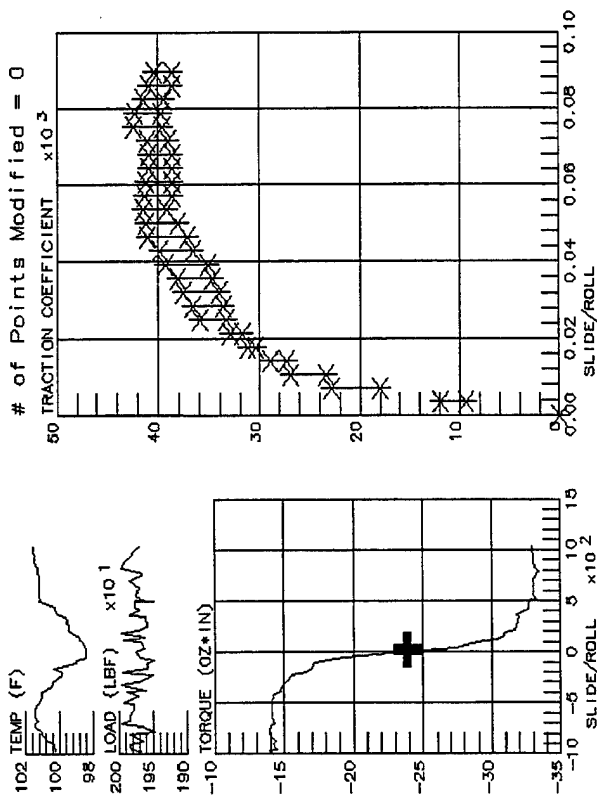
CO 90-715 ~220 Hatcol 3110 #79
100F 66LBF 2563RPM 16 FILE: co100mex



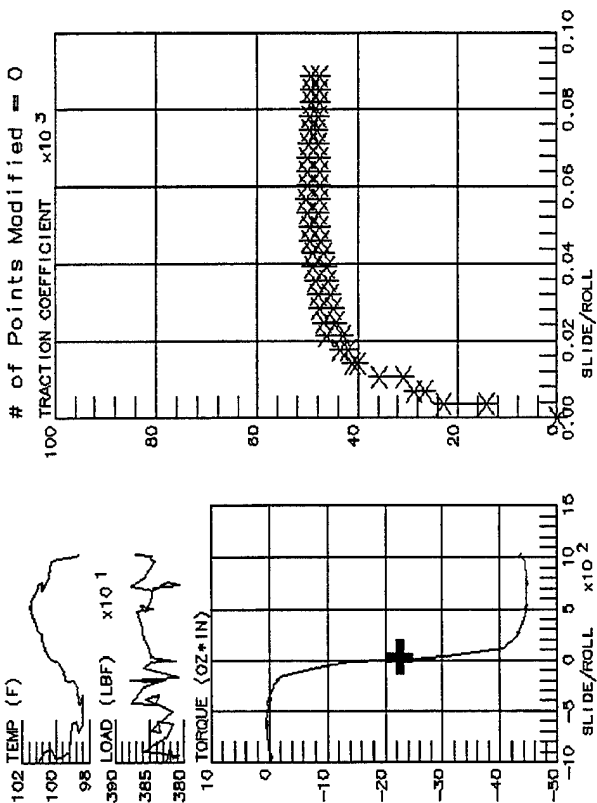
CO 90-715 ~220 Hatcol 3110 #80
100F 8LBF 5097RPM 1 FILE: co100vh



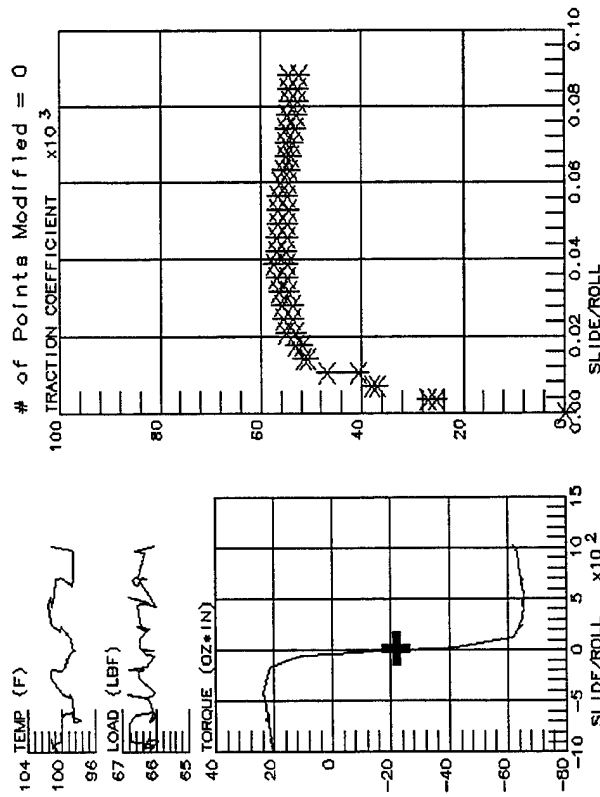
CO 90-715 ~220 Hatcol 3110 #81
100F 20LBF 5097RPM 2 FILE: co100vh



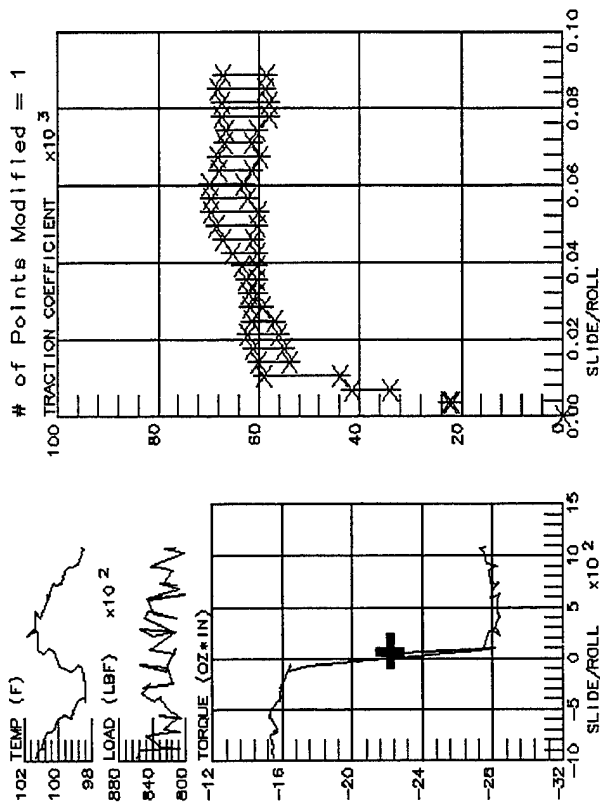
CO 90-715 ~220 Hatcol 3110 #82
100F 38LBF 5097RPM 3 FILE: co100vh



CO 90-715 ~220 Hatcol 3110 #83
100F 66LBF 5097RPM 4 FILE: co100vh

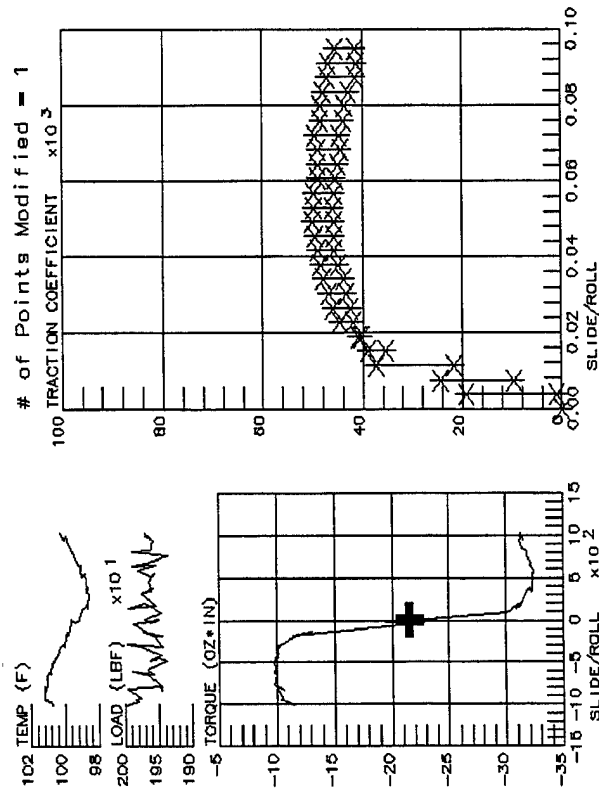


CO 90-715 ~220 Hatcol 3110 #84
100F 8LBF 7665RPM 5 FILE: co100vh



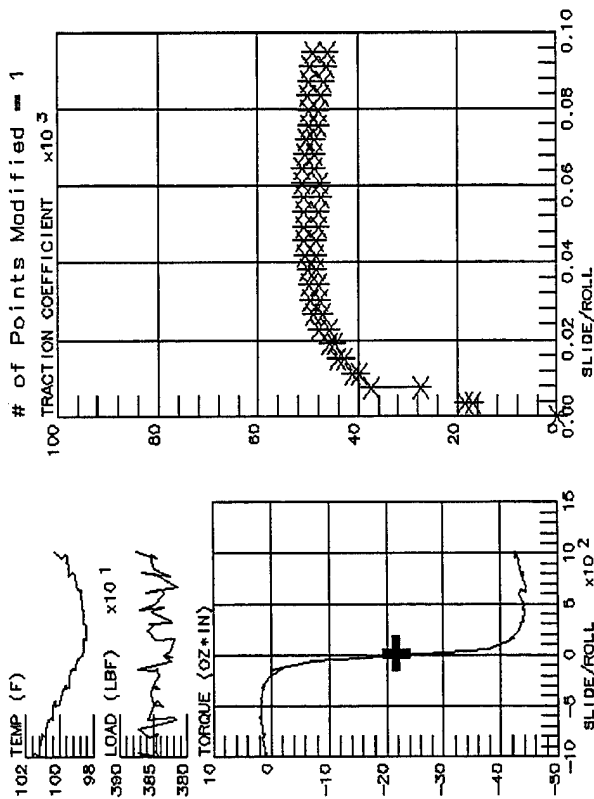
CO 90-715 ~220 Hatcol 3110 #85
100F 20LBF 7665RPM 8 FILE: co100vh

of Points Modified = 1



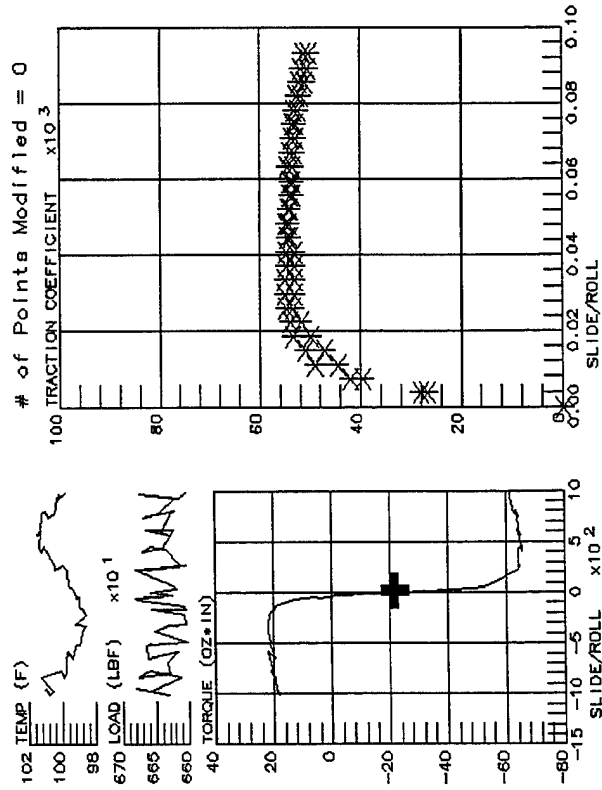
CO 90-715 ~220 Hatcol 3110 #86
100F 38LBF 7665RPM 7 FILE: co100vh

of Points Modified = 1



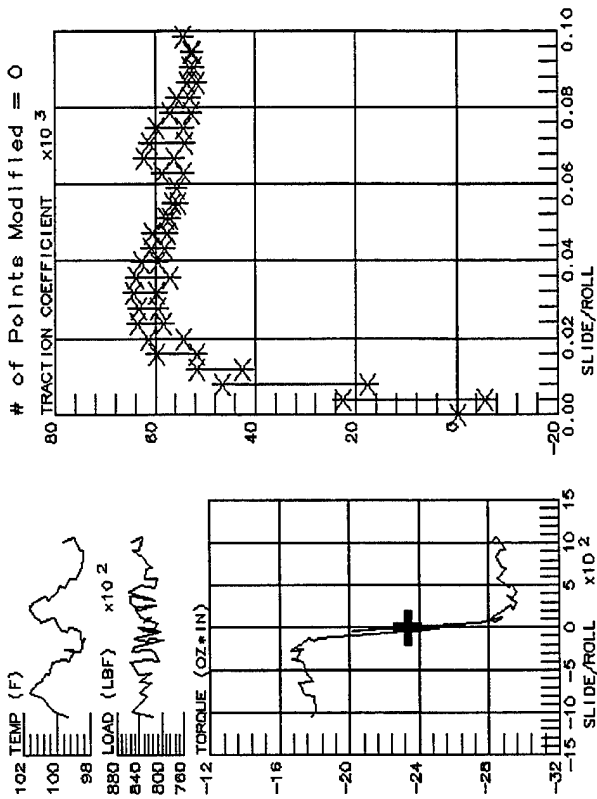
CO 90-715 ~220 Hatcol 3110 #87
100F 66LBF 7665RPM 8 FILE: co100vh

of Points Modified = 0

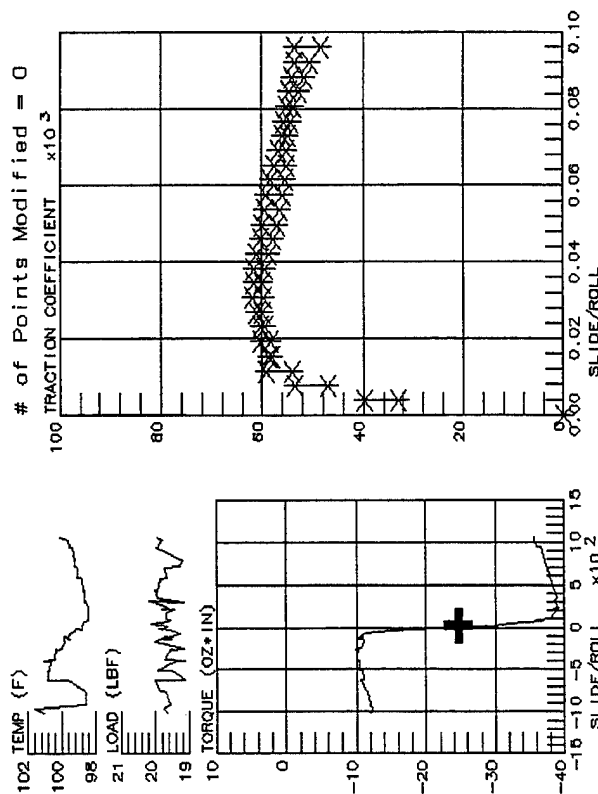


CO 90-715 ~220 Hatcol 3110 #88
100F 8LBF 10225RPM 9 FILE: co100vh

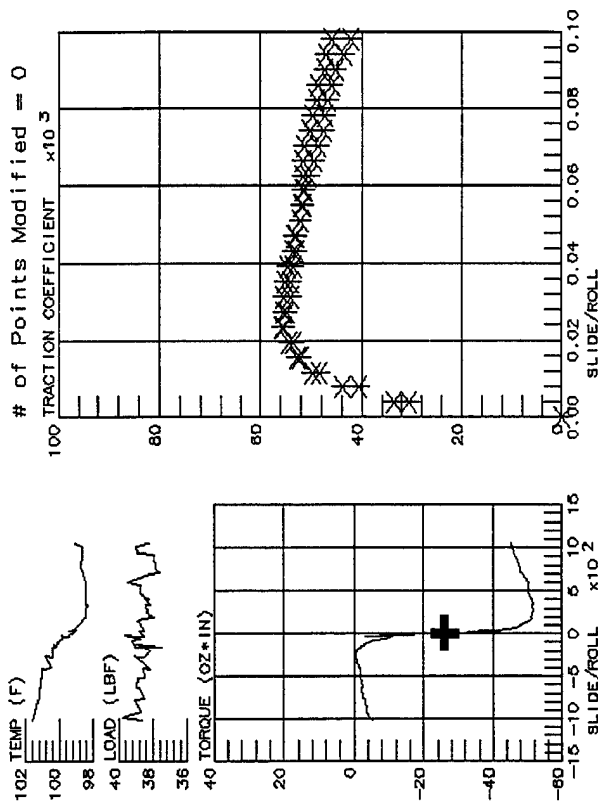
of Points Modified = 0



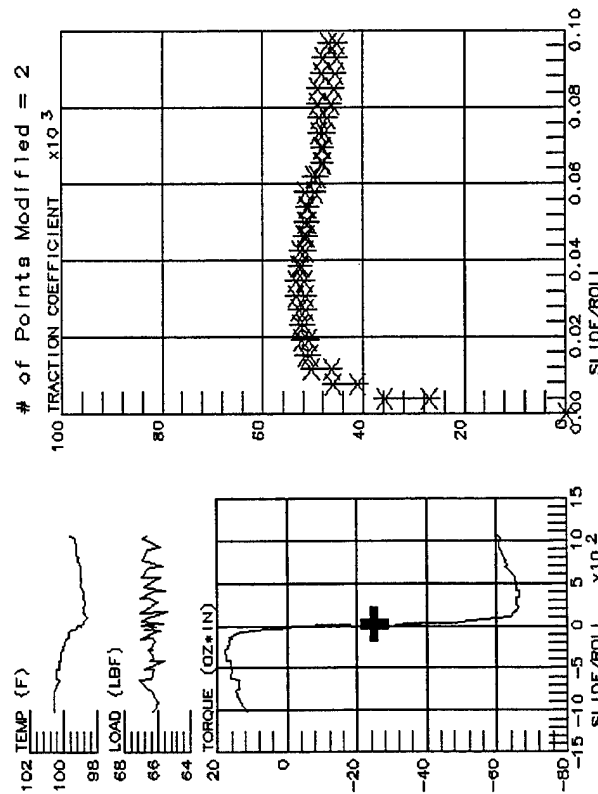
CO 90-715 ~220 Hatcol 3110 #89
100F 20LBF 10225RPM 10 FILE: co100vh



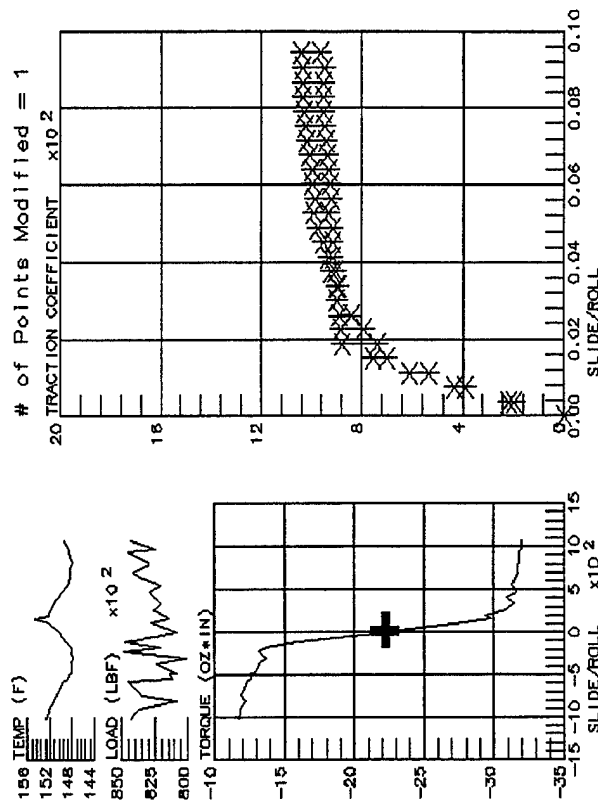
CO 90-715 ~220 Hatcol 3110 #90
100F 38LBF 10225RPM 11 FILE: co100vh



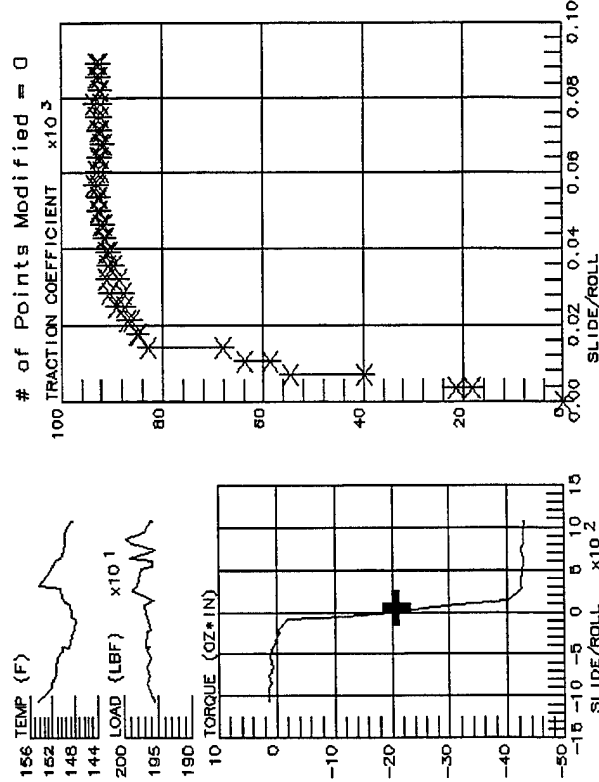
CO 90-715 ~220 Hatcol 3110 #91
100F 68LBF 10225RPM 12 FILE: co100vh



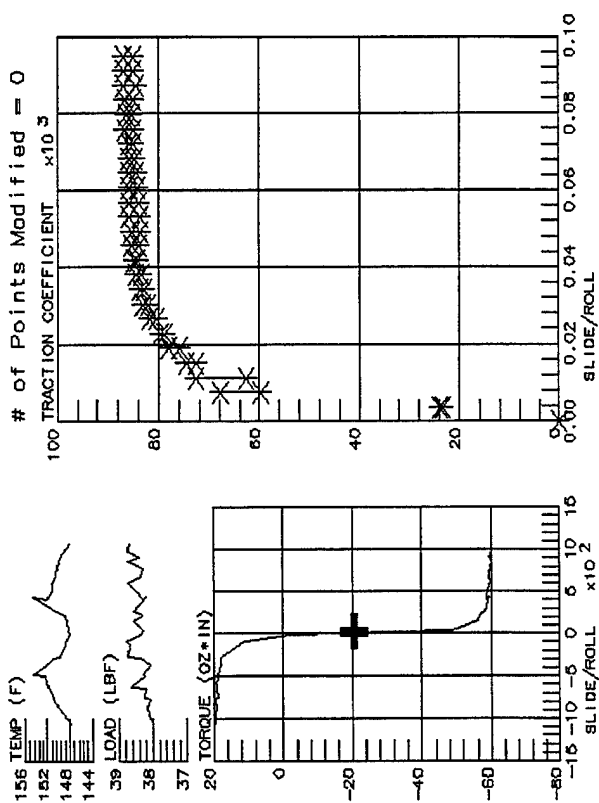
CO 90-715 ~220 Hatcol 3110 #92
150F 8LBF 306RPM 1 FILE: co150v1



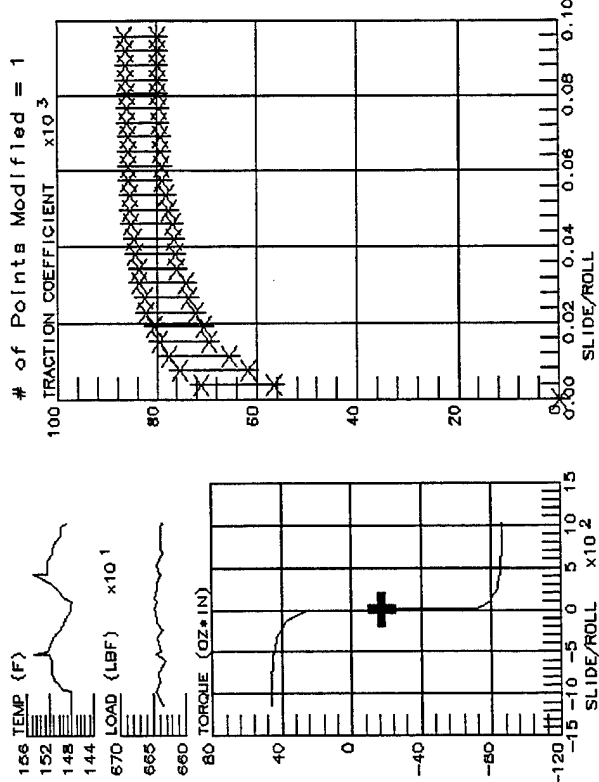
CO 90-715 ~220 Hatool 3110 #93
150F 20LBF 306RPM 2 FILE: co150v1



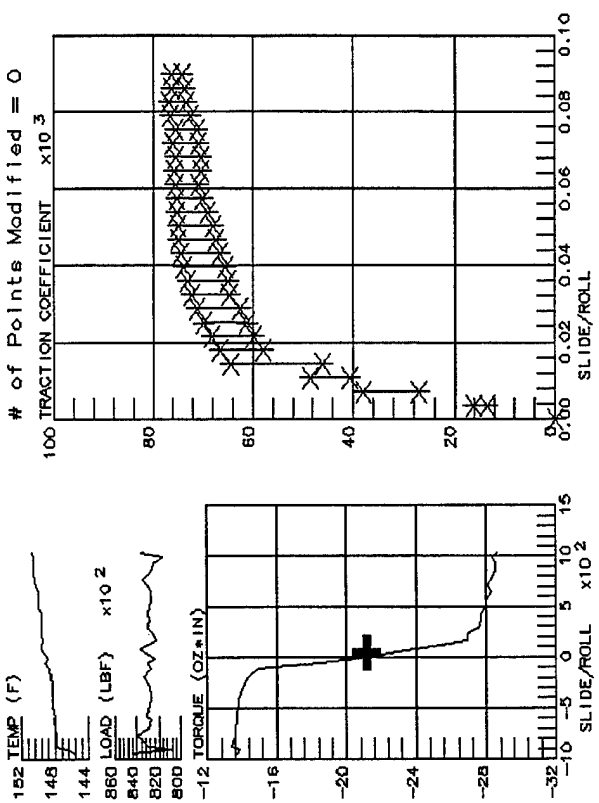
CO 90-715 ~220 Hatool 3110 #94
150F 38LBF 306RPM 3 FILE: co150v1



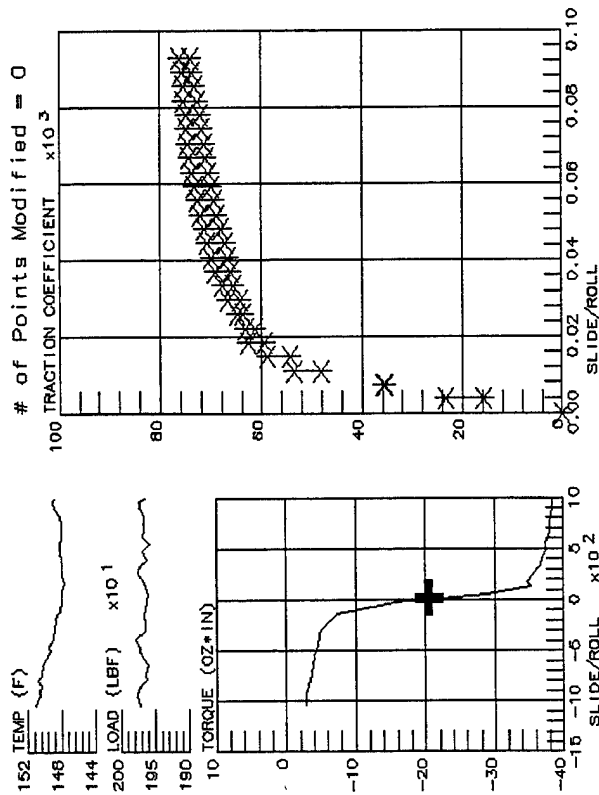
CO 90-715 ~220 Hatool 3110 #95
150F 66LBF 306RPM 4 FILE: co150v1



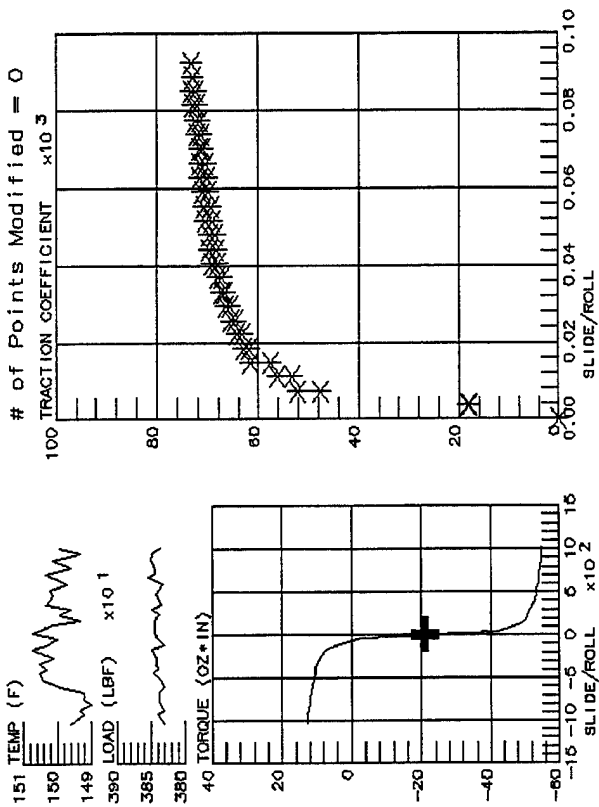
CO 90-715 ~220 Hatool 3110 #96
150F 8LBF 651RPM 5 FILE: co150v1



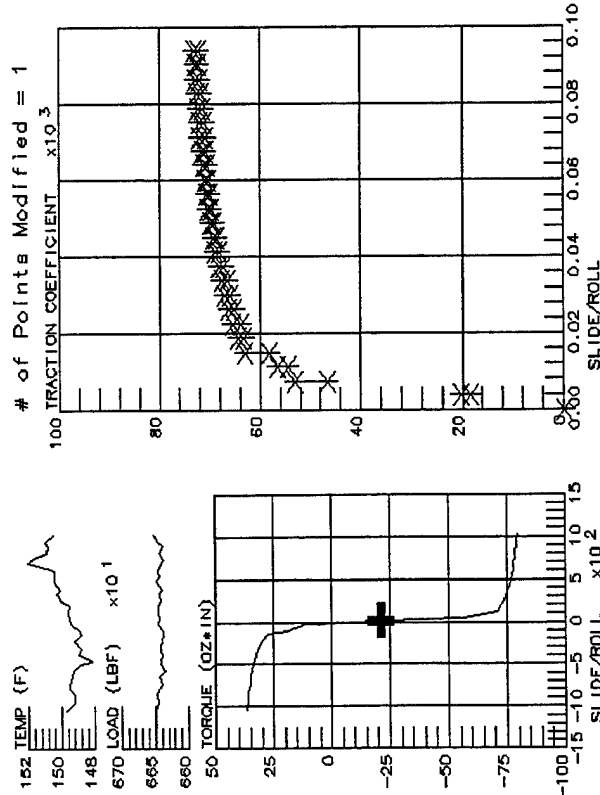
CO 90-715 ~220 Hatcol 3110 #97
150F 20LBF 651RPM 8 FILE: co150v1



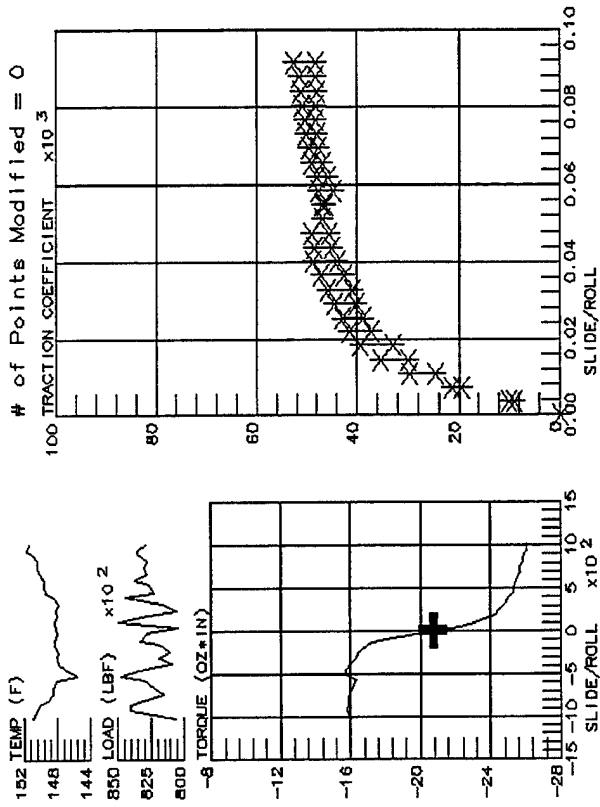
CO 90-715 ~220 Hatcol 3110 #98
150F 38LBF 661RPM 7 FILE: co150v1

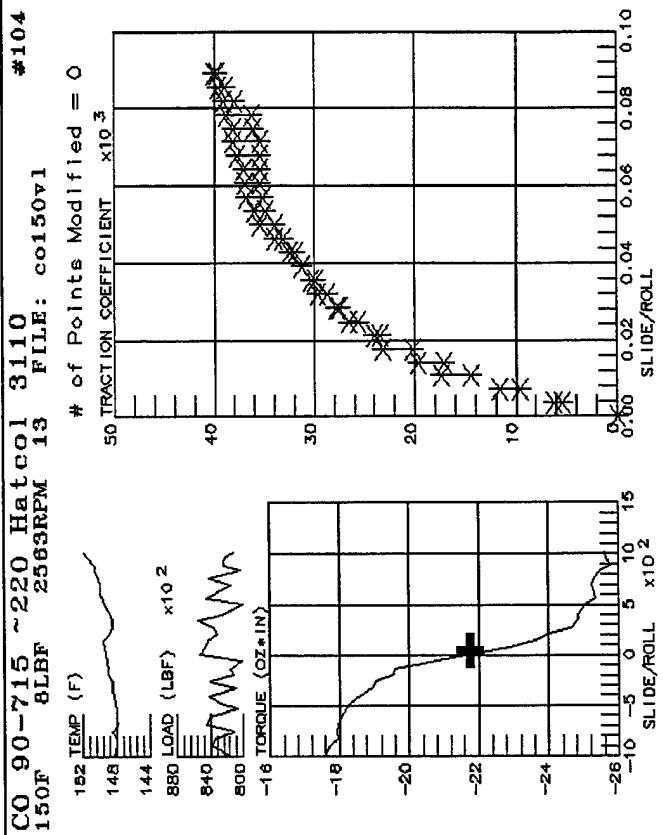
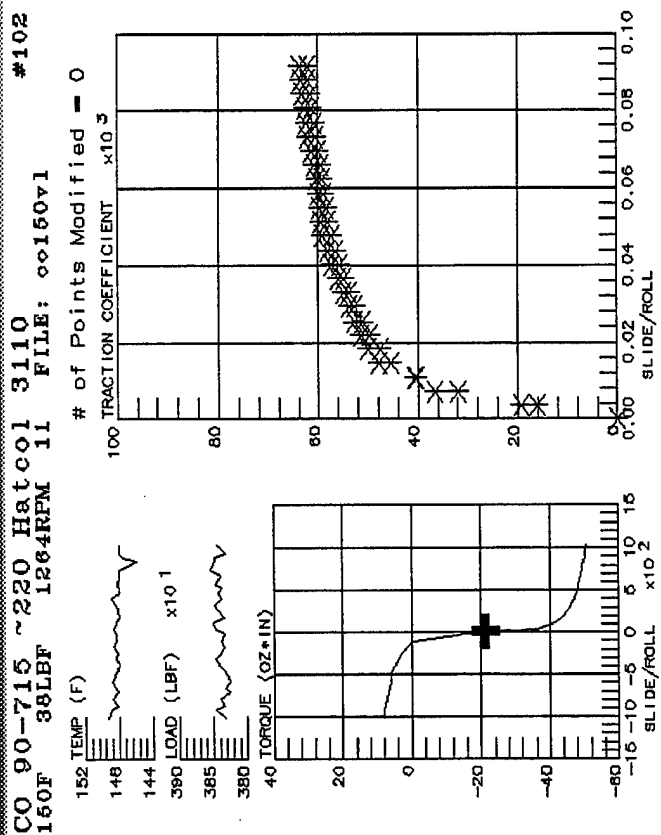
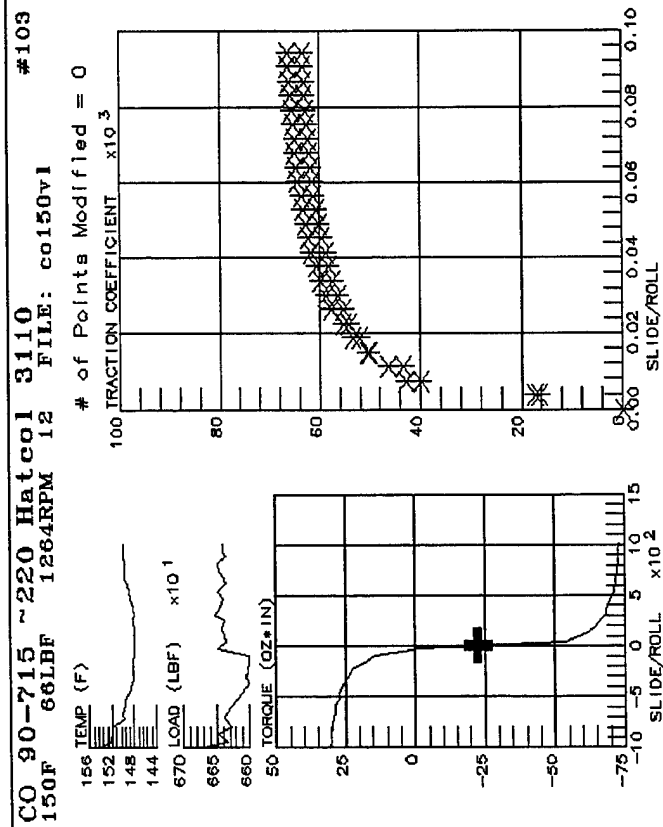
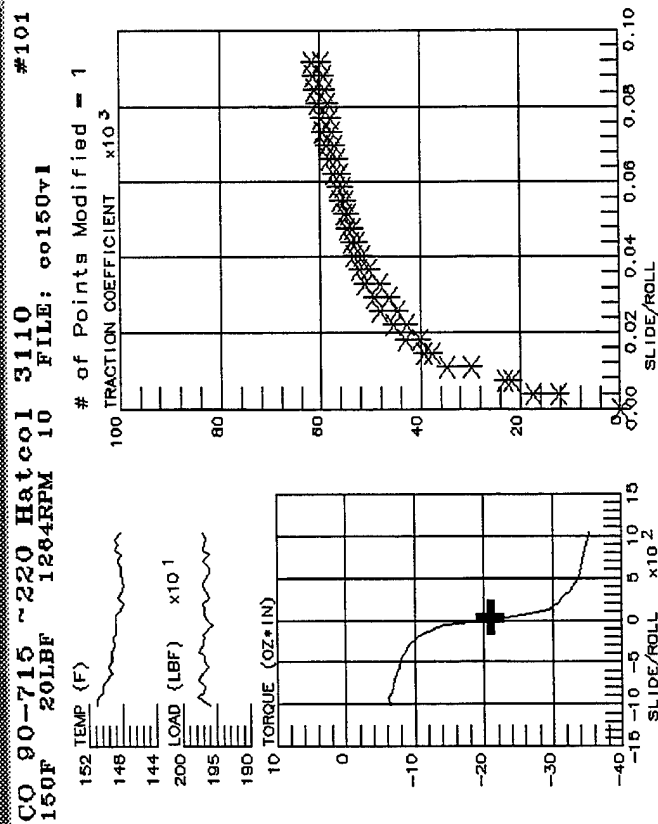


CO 90-715 ~220 Hatcol 3110 #99
150F 66LBF 651RPM 8 FILE: co150v1

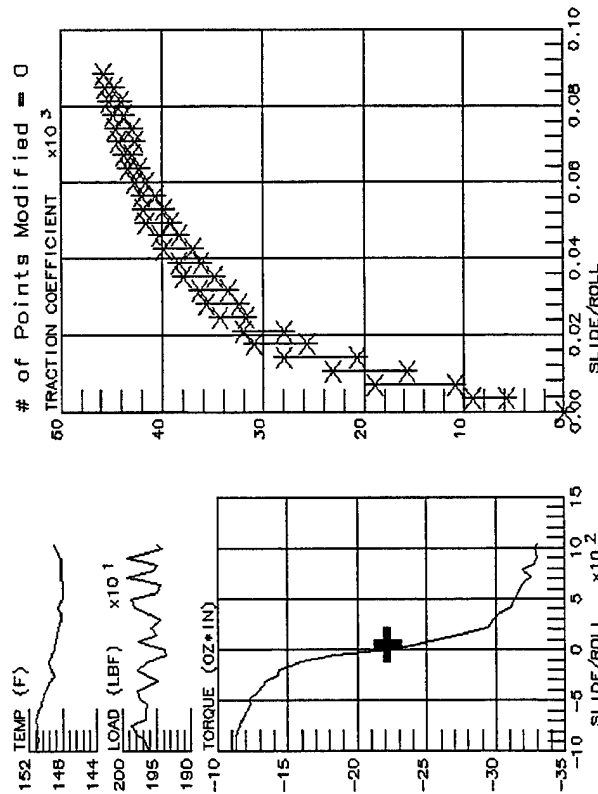


CO 90-715 ~220 Hatcol 3110 #100
150F 8LBF 1264RPM 9 FILE: co150v1

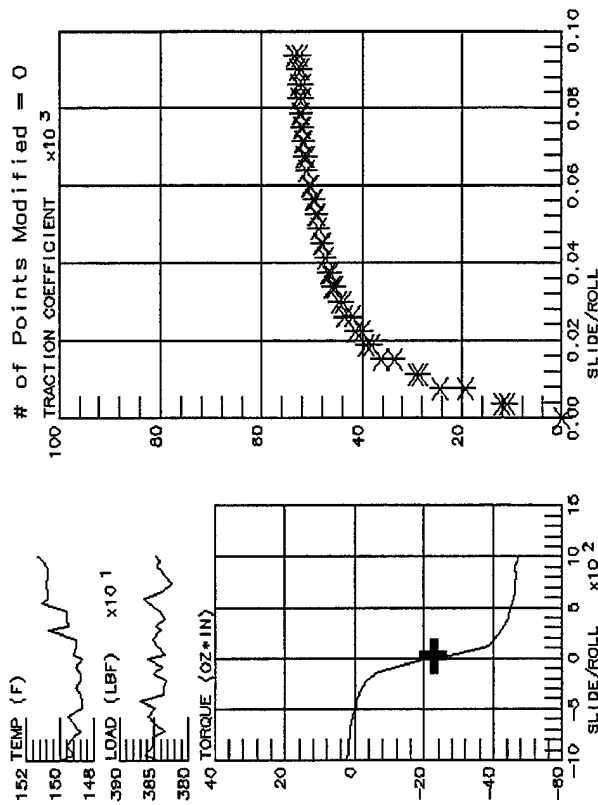




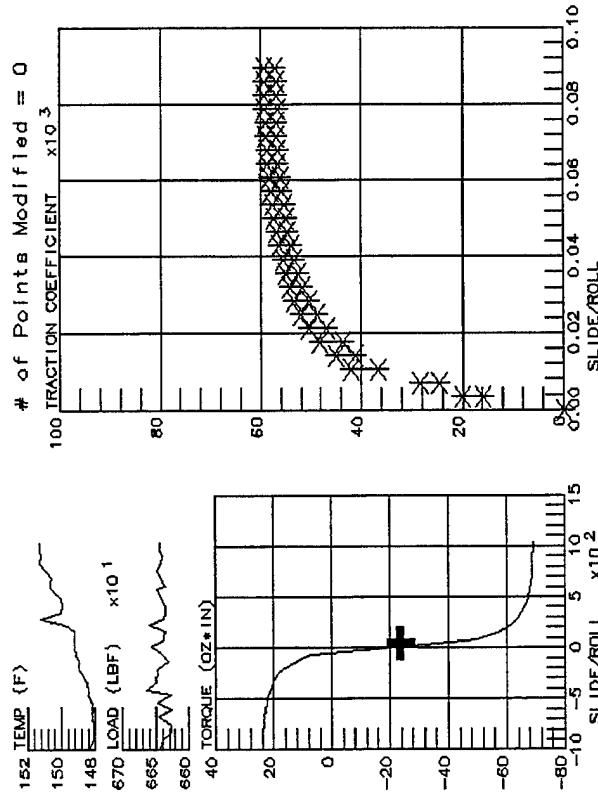
CO 90-715 ~220 Hatcol 3110 #105
150F 20LBF 2563RPM 14 FILE: co150v1



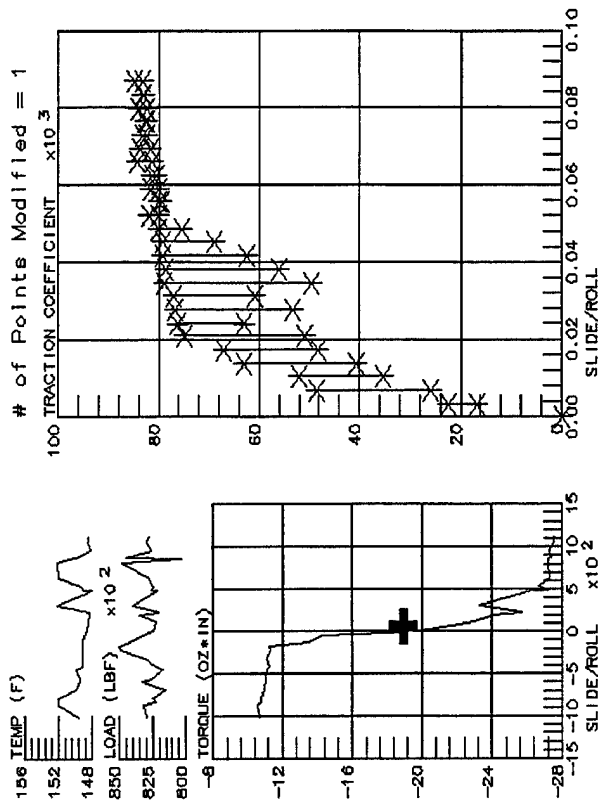
CO 90-715 ~220 Hatcol 3110 #108
150F 38LBF 2563RPM 15 FILE: co150v1



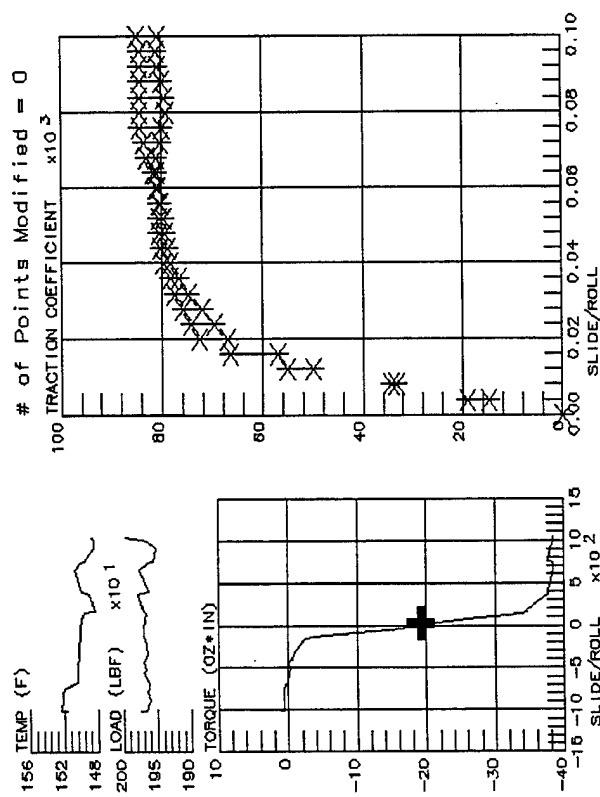
CO 90-715 ~220 Hatcol 3110 #107
150F 66LBF 2563RPM 16 FILE: co150v1



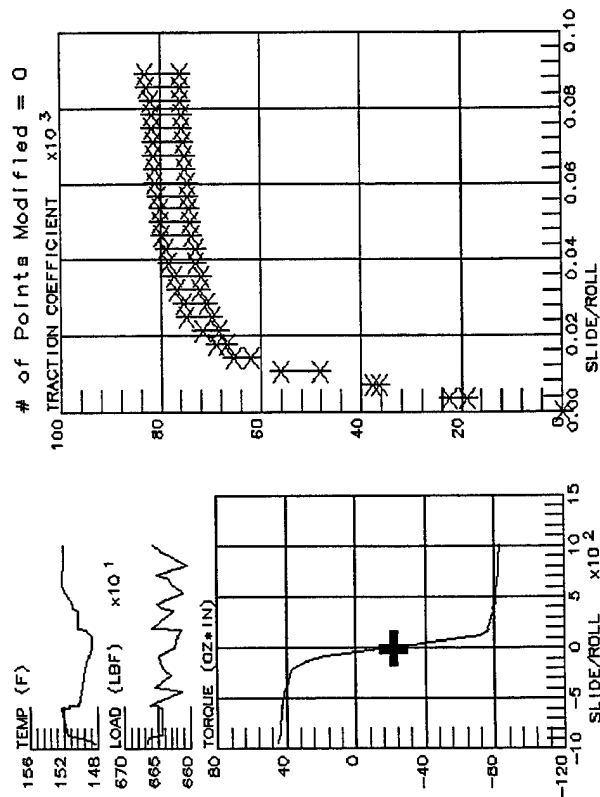
CO 90-715 ~220 Hatcol 3110 #108
150F 8LBF 306RPM 1 FILE: co150med



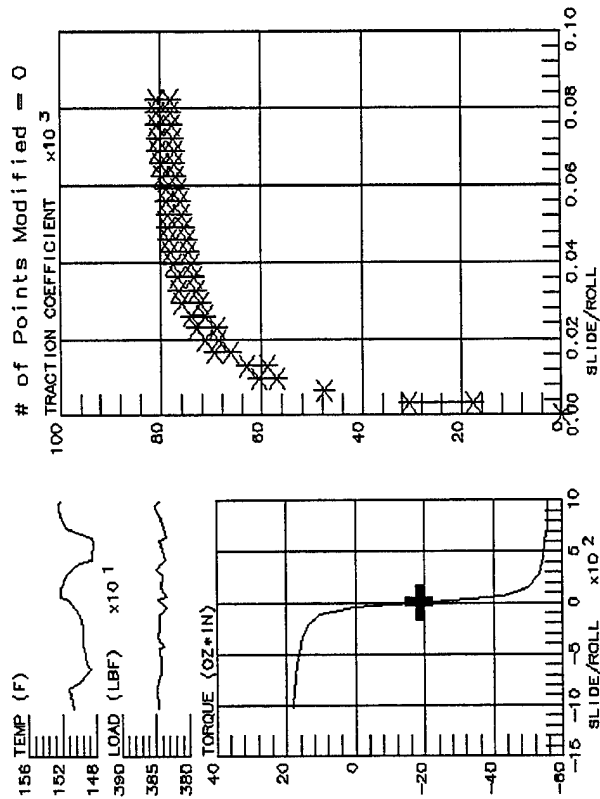
CO 90-715 ~220 Hatcol 3110 #109
150F 20LBF 306RPM 3 FILE: co150med



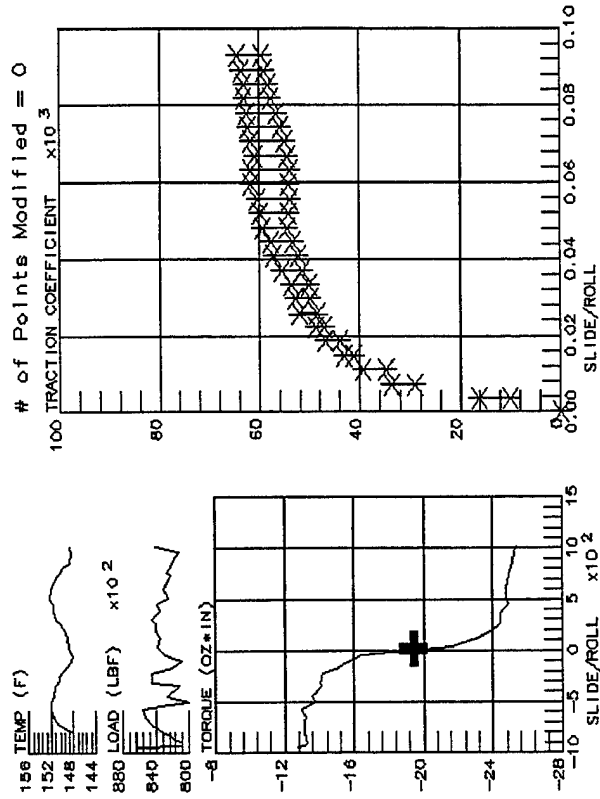
CO 90-715 ~220 Hatcol 3110 #111
150F 66LBF 306RPM 4 FILE: co150med



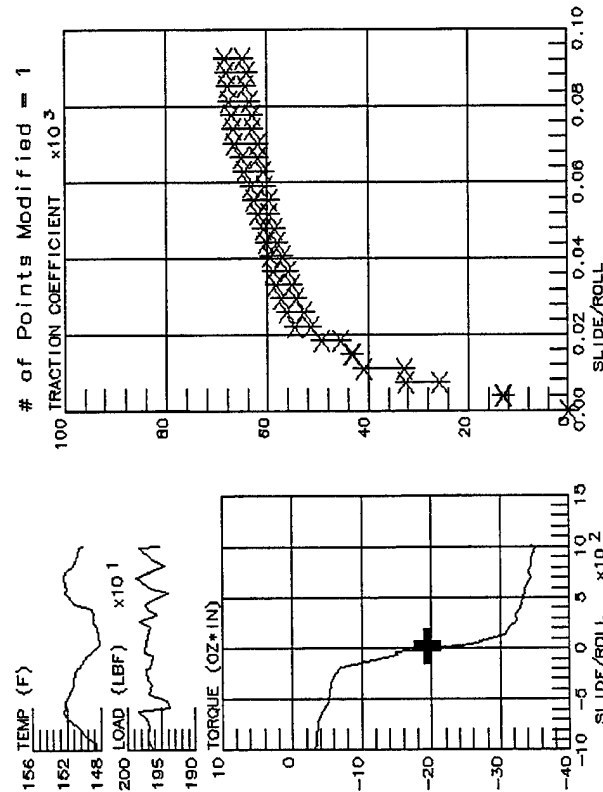
CO 90-715 ~220 Hatcol 3110 #110
150F 38LBF 306RPM 3 FILE: co150med



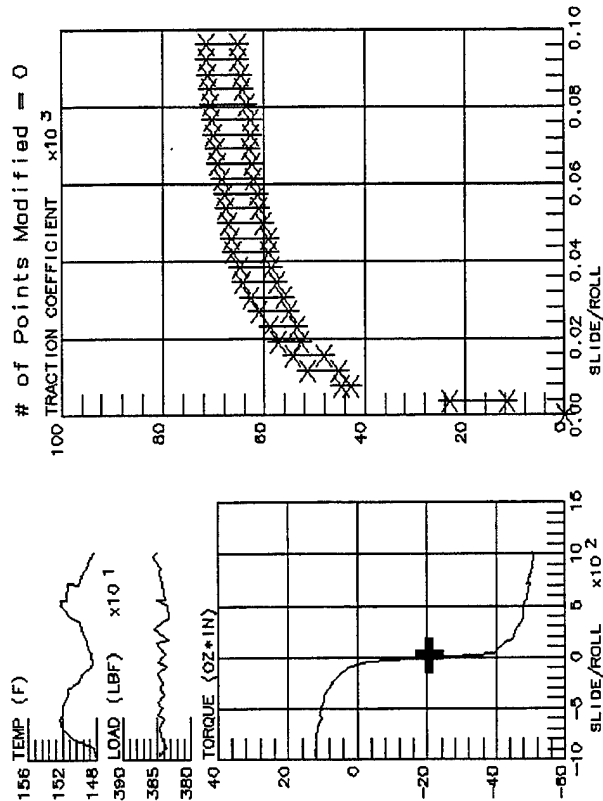
CO 90-715 ~220 Hatcol 3110 #112
150F 8LBF 651RPM 5 FILE: co150med



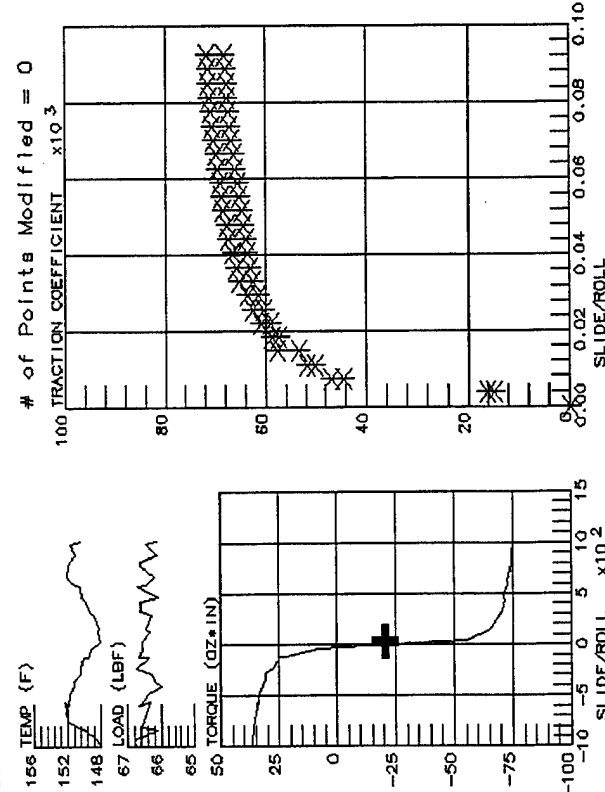
CO 90-715 ~220 Hatcol 3110 #113
150F 20LBF 651RPM 6 FILE: co150med



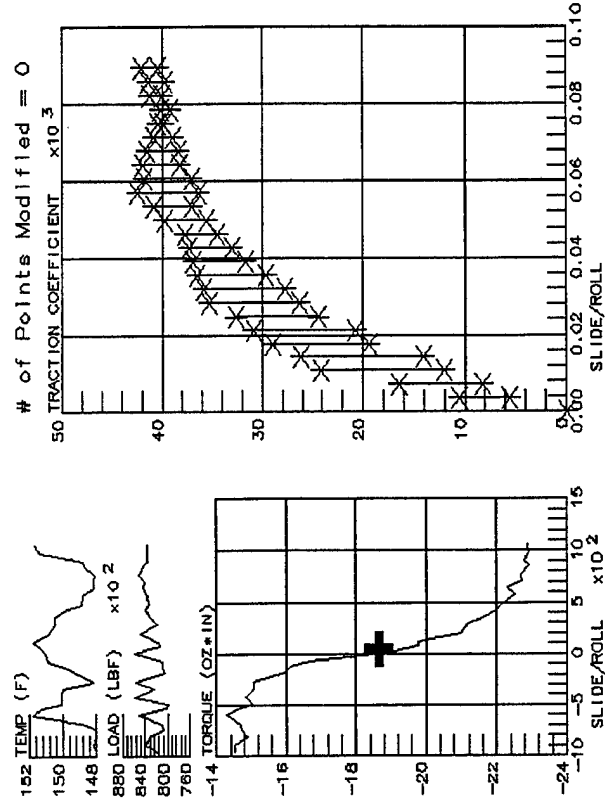
CO 90-715 ~220 Hatcol 3110 #114
150F 38LBF 661RPM 7 FILE: co150med



CO 90-715 ~220 Hatcol 3110 #115
150F 66LBF 651RPM 8 FILE: co150med

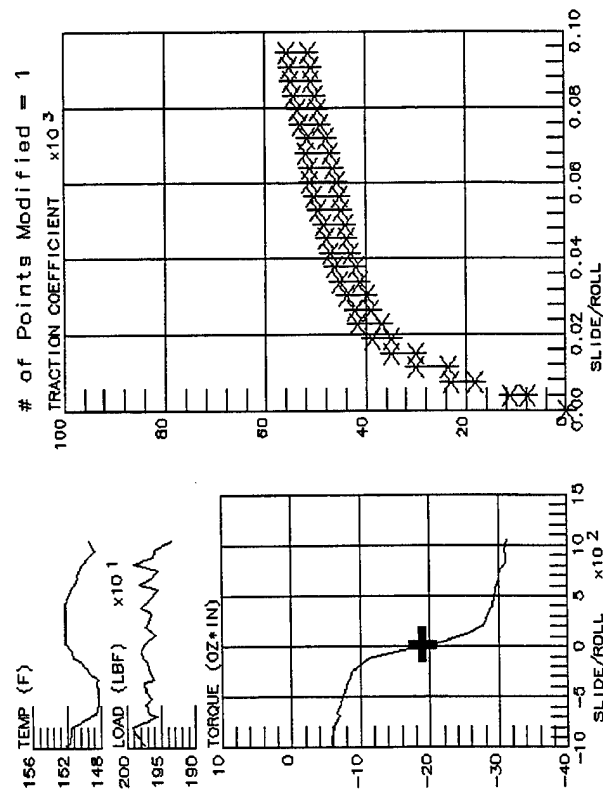


CO 90-715 ~220 Hatcol 3110 #116
150F 8LBF 1264RPM 9 FILE: co150med



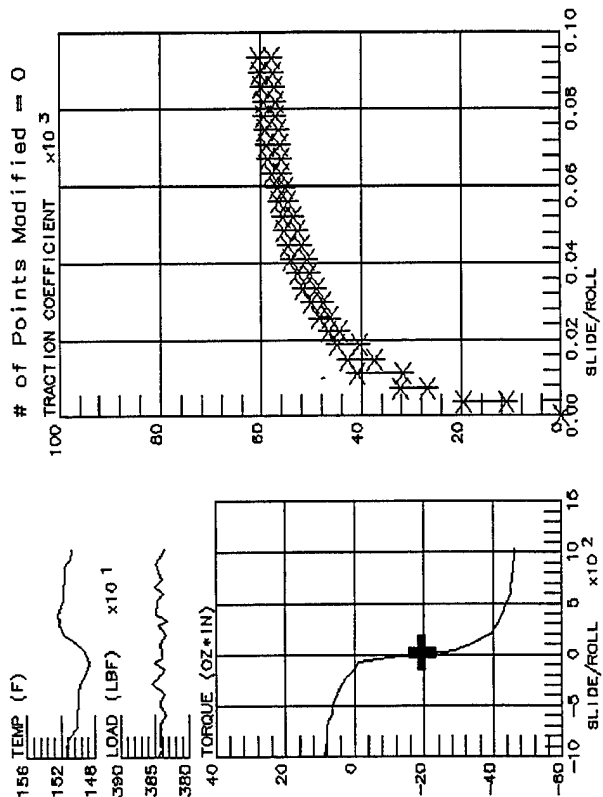
CO 90-715 ~220 Hatcol 3110 #117
150F 20LBF 1264RPM 10 FILE: co150med

of Points Modified = 1



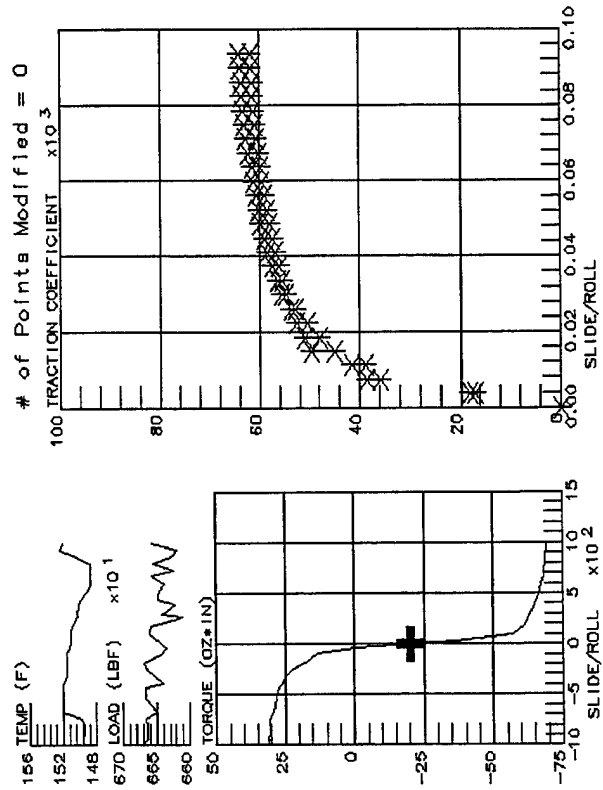
CO 90-715 ~220 Hatcol 3110 #118
150F 38LBF 1264RPM 11 FILE: co150med

of Points Modified = 0



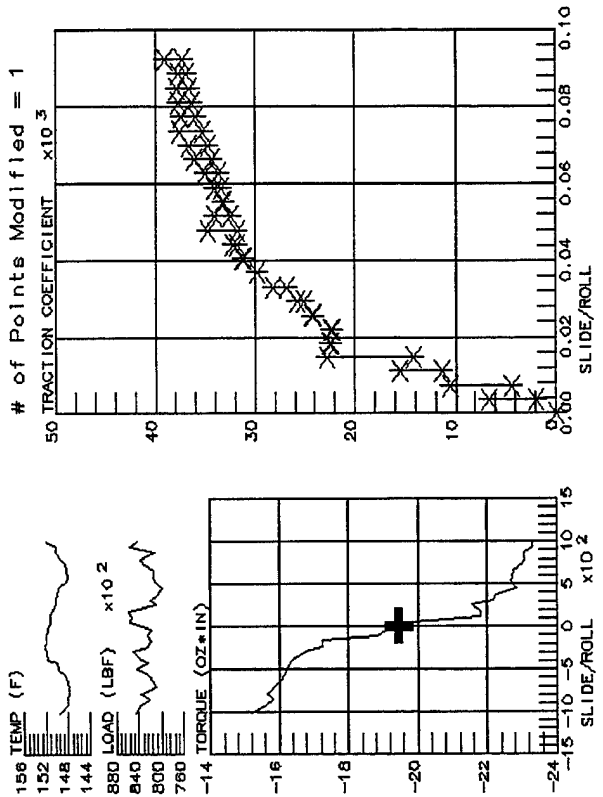
CO 90-715 ~220 Hatcol 3110 #119
150F 66LBF 1264RPM 12 FILE: co150med

of Points Modified = 0

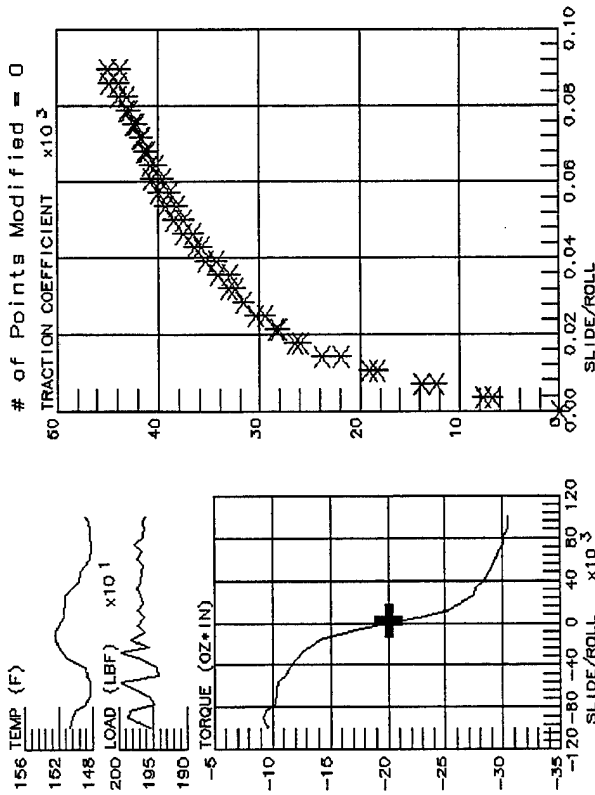


CO 90-715 ~220 Hatcol 3110 #120
150F 8LBF 2563RPM 13 FILE: co150med

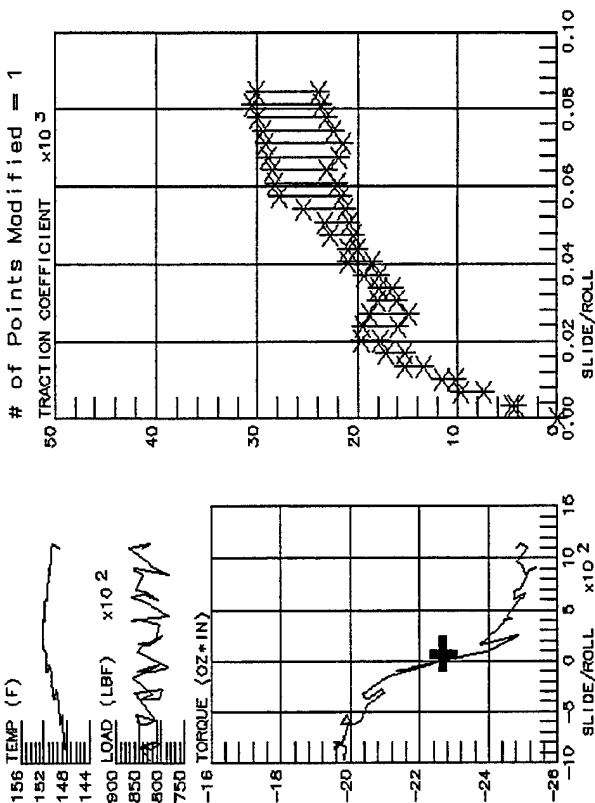
of Points Modified = 1



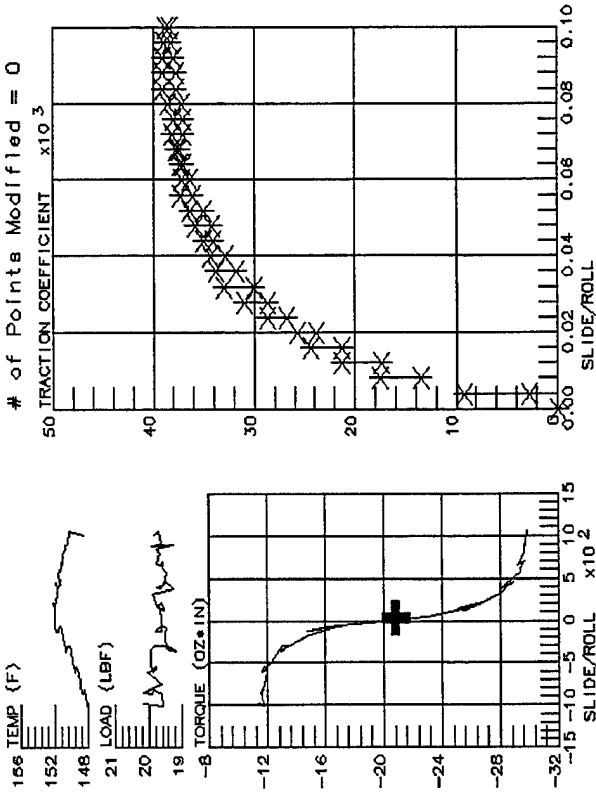
CO 90-715 ~220 Hatcol 3110 #121
150F 20LBF 2563RPM 14 FILE: co150med



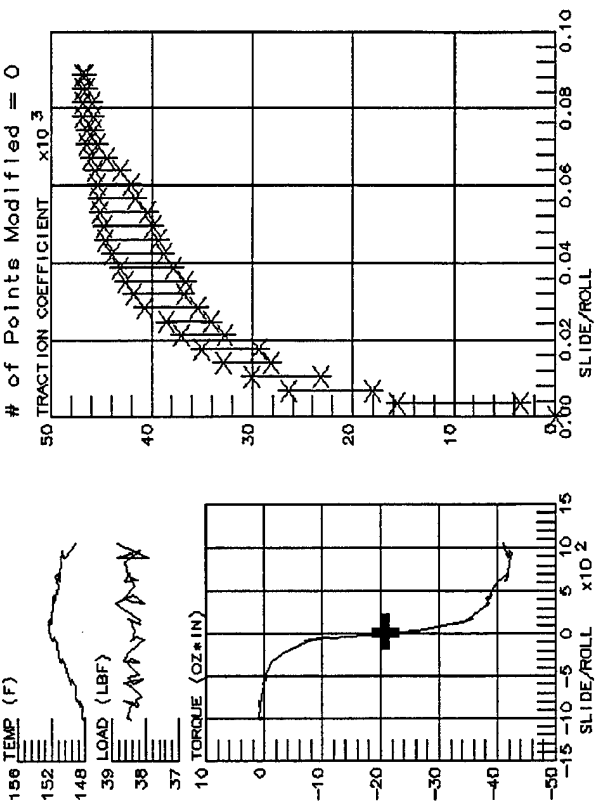
CO 90-715 ~220 Hatcol 3110 #122
150F 8LBF 5097RPM 1 FILE: co150vh

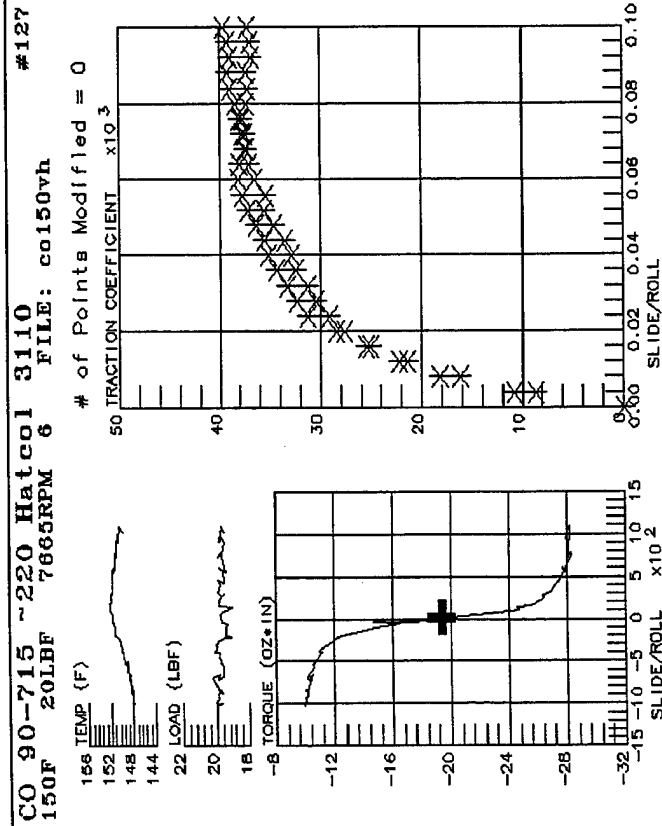
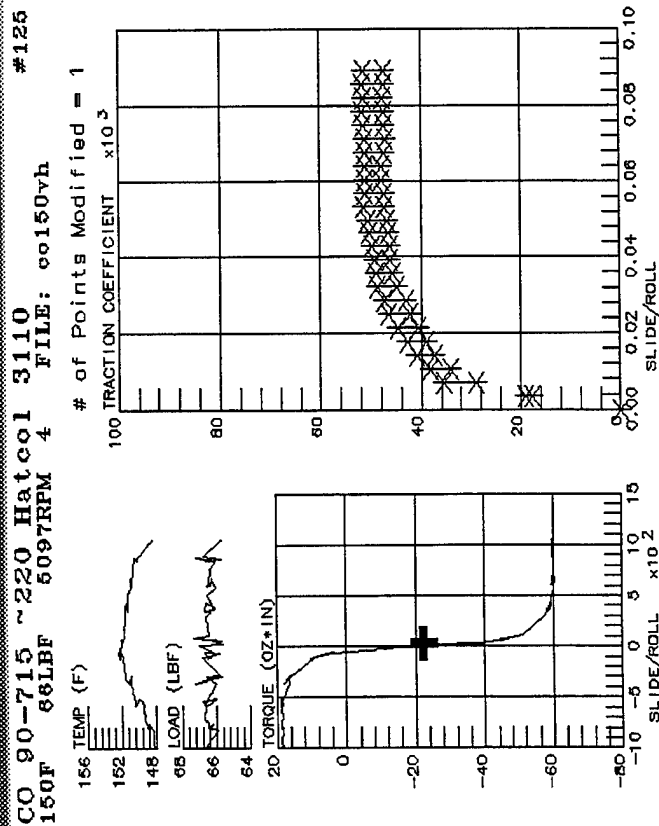


CO 90-715 ~220 Hatcol 3110 #123
150F 20LBF 5097RPM 2 FILE: co150vh

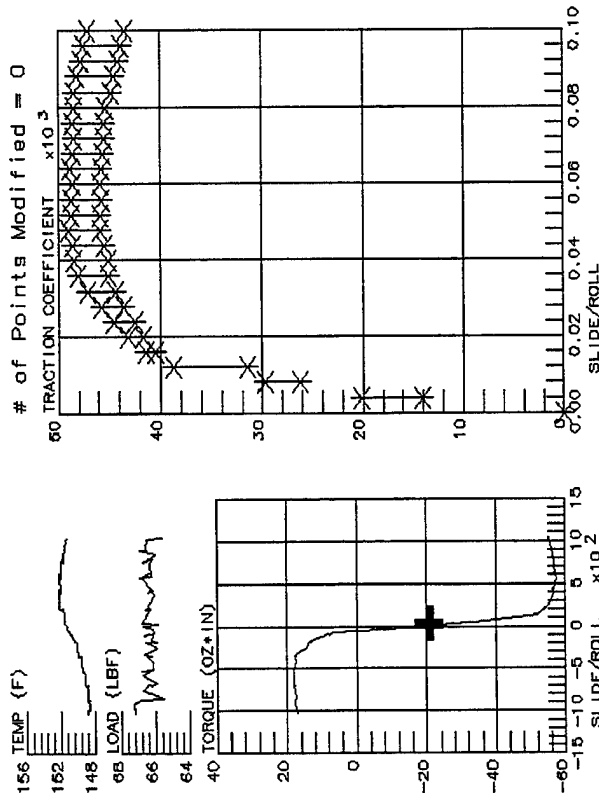


CO 90-715 ~220 Hatcol 3110 #124
150F 38LBF 5097RPM 3 FILE: co150vh

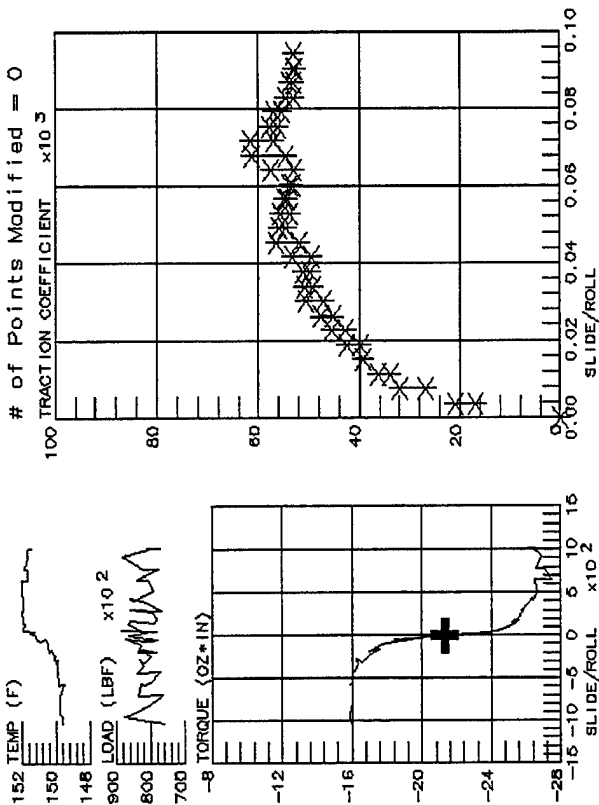




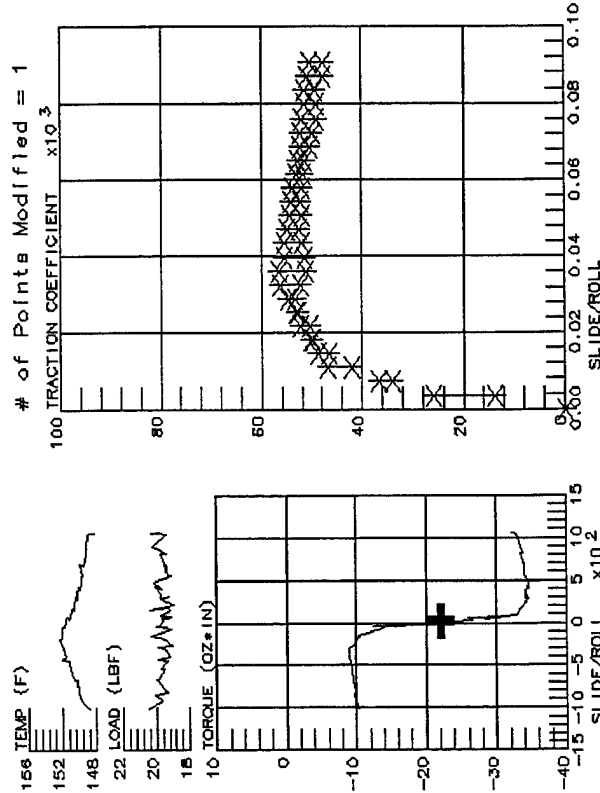
CO 90-715 ~220 Hatcol 3110 #129
150F 86LBF 7685RPM 8 FILE: co150vh



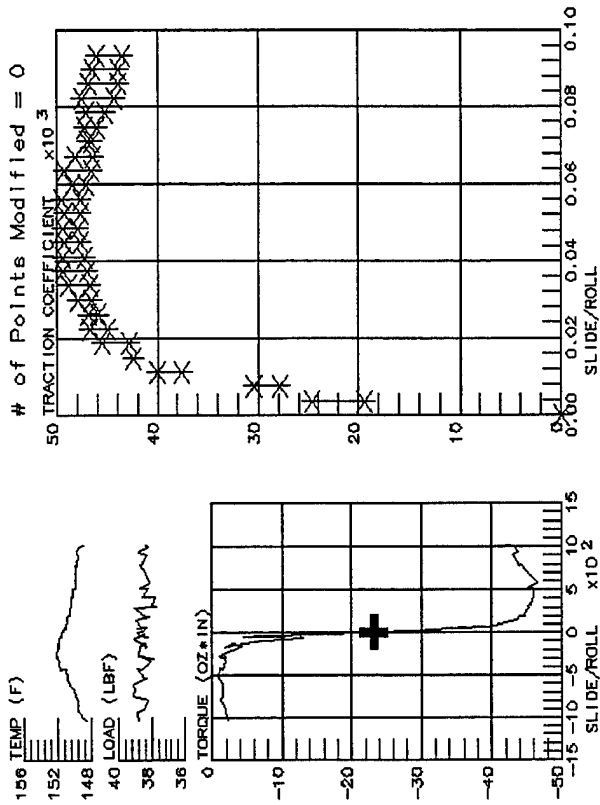
CO 90-715 ~220 Hatcol 3110 #130
150F 8LBF 10225RPM 9 FILE: co150vh



CO 90-715 ~220 Hatcol 3110 #131
150F 20LBF 10225RPM 10 FILE: co150vh

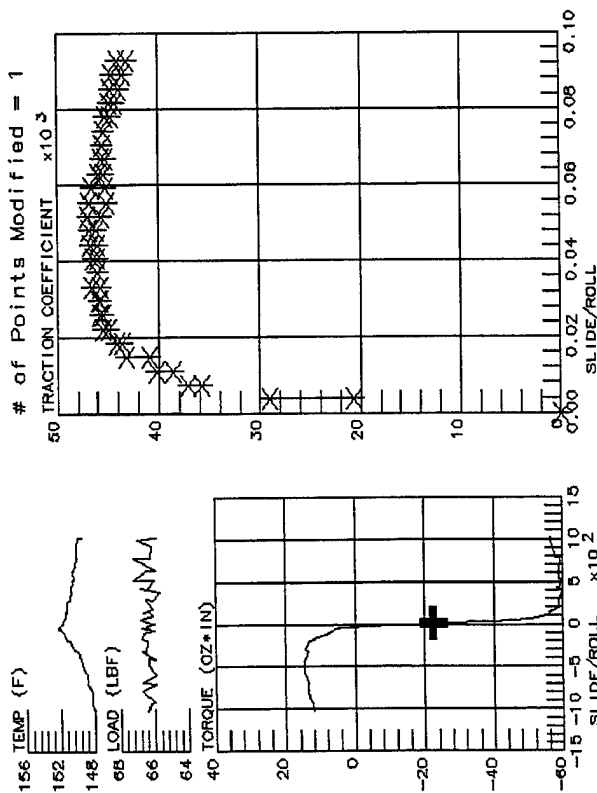


CO 90-715 ~220 Hatcol 3110 #132
150F 38LBF 10225RPM 11 FILE: co150vh



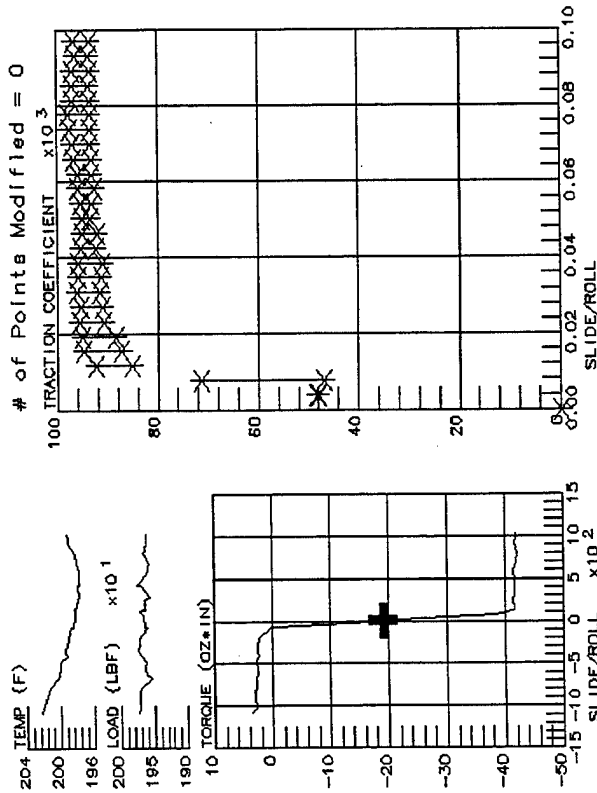
CO 90-715 ~220 Hatcol 3110 #133
150F 86LBF 10225RPM 12 FILE: co150vh

of Points Modified = 1



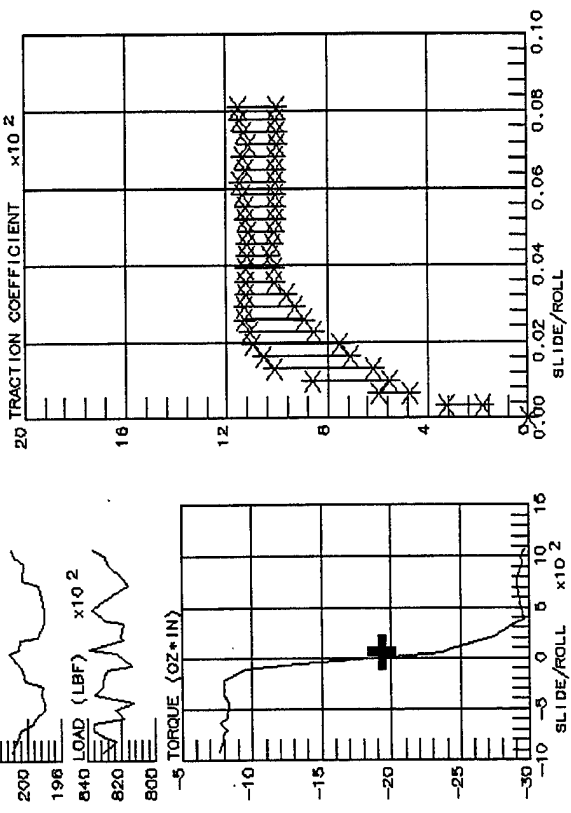
CO 90-715 ~220 Hatcol 3110 #135
200F 20LBF 306RPM 2 FILE: co20-301

of Points Modified = 0



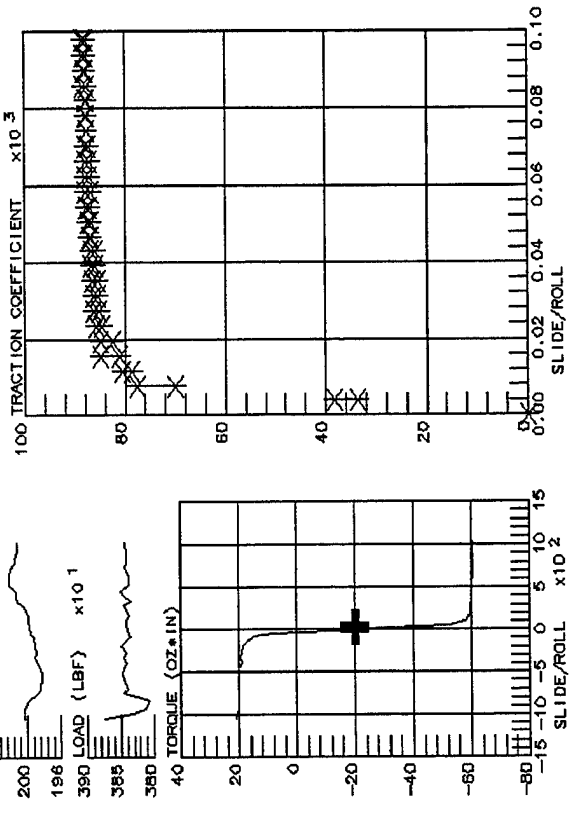
CO 90-715 ~220 Hatcol 3110 #134
200F 8LBF 306RPM 1 FILE: co20-301

of Points Modified = 1

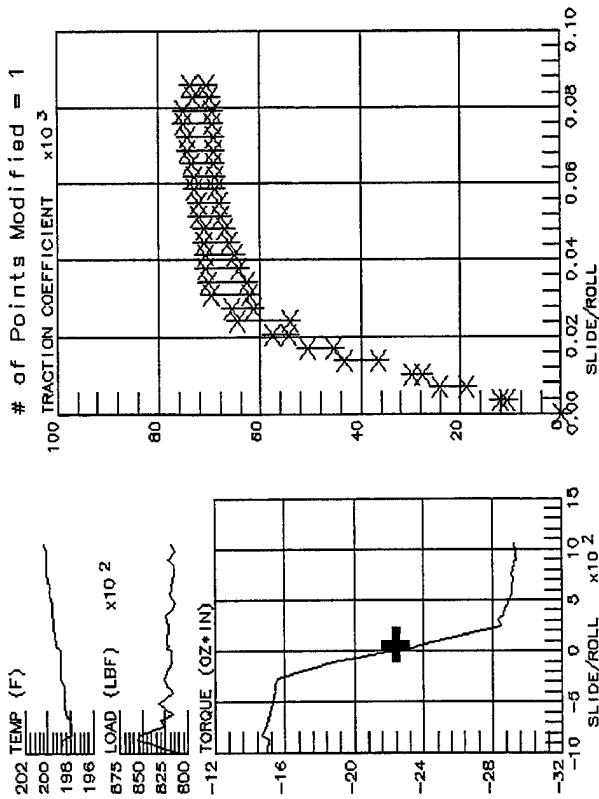


CO 90-715 ~220 Hatcol 3110 #136
200F 36LBF 306RPM 3 FILE: co20-301

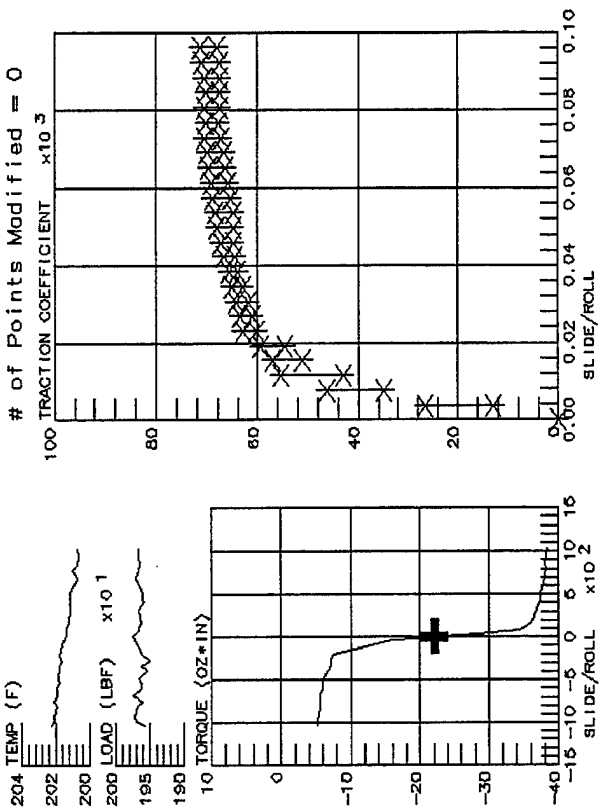
of Points Modified = 0



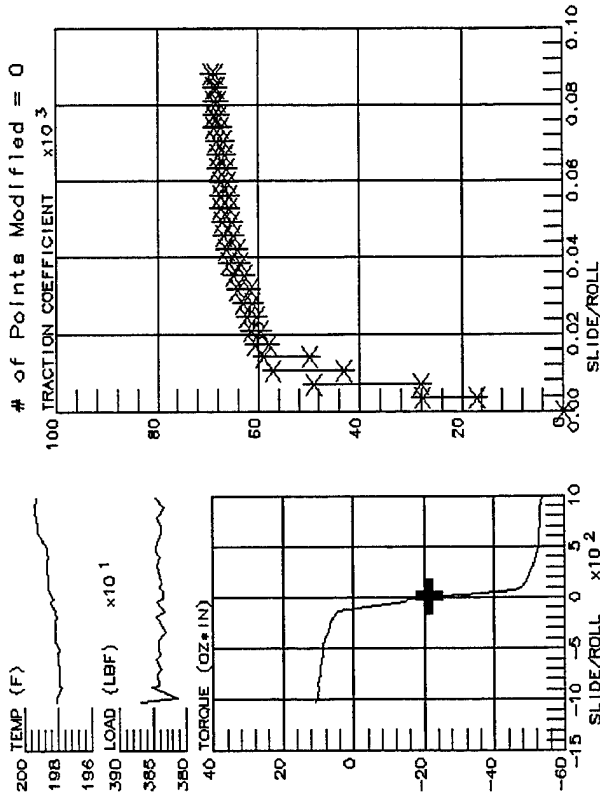
CO 90-715 ~220 Hatool 3110 #137
200F 8LBF 651RPM 4 FILE: co20-301



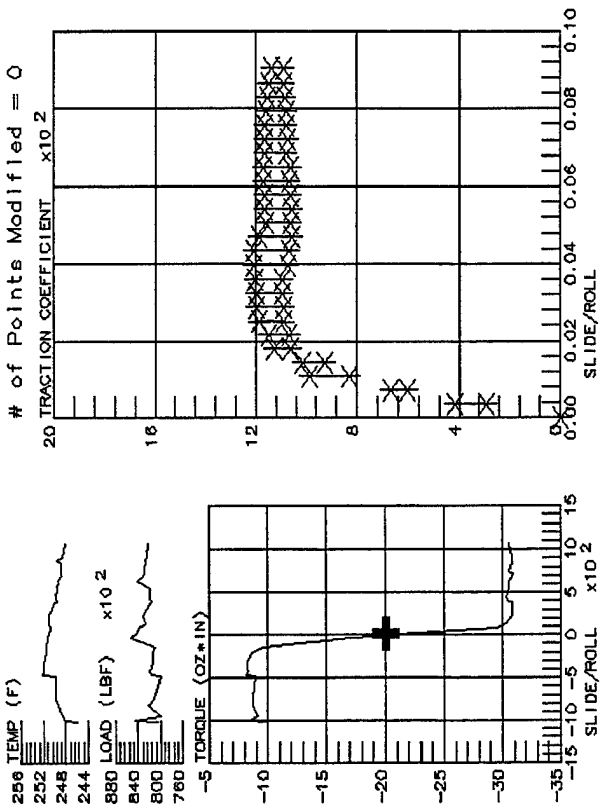
CO 90-715 ~220 Hatool 3110 #138
200F 20LBF 661RPM 5 FILE: co20-301



CO 90-715 ~220 Hatool 3110 #139
200F 38LBF 651RPM 6 FILE: co20-301

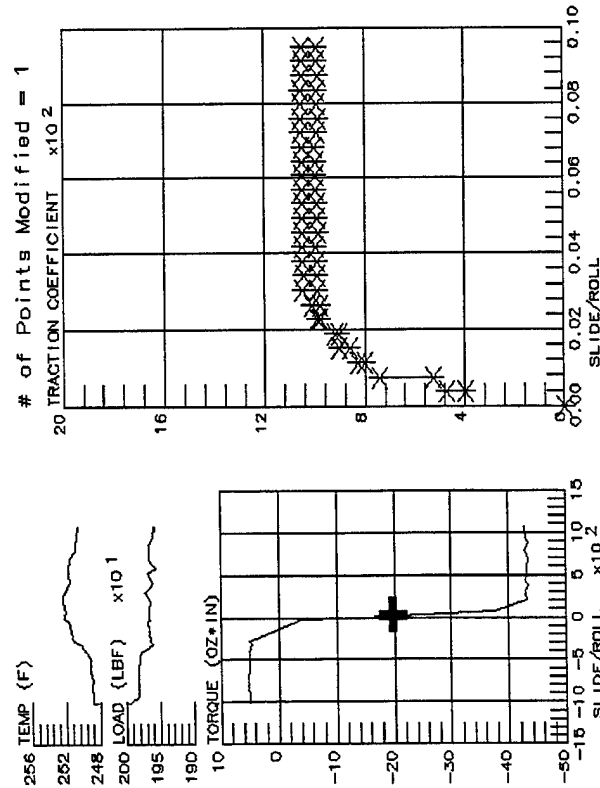


CO 90-715 ~220 Hatool 3110 #140
250F 8LBF 306RPM 7 FILE: co20-301

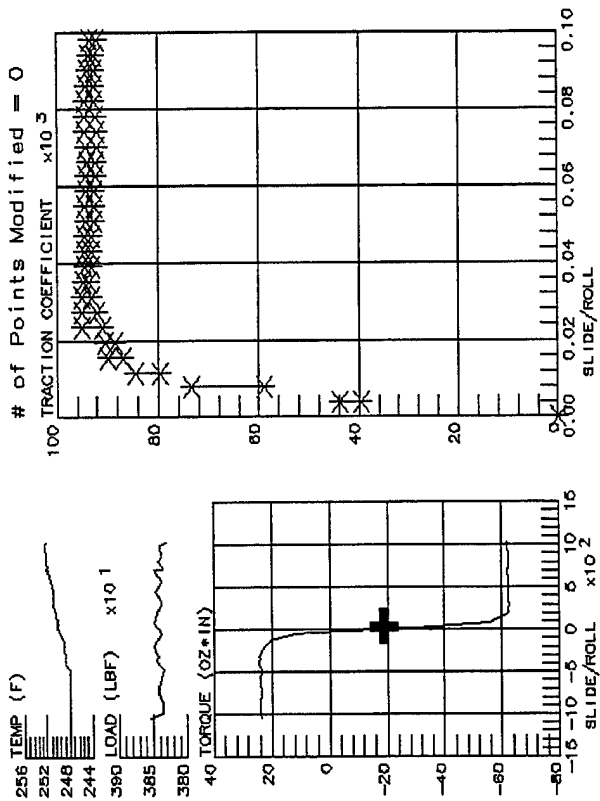


TRACTION MODELS

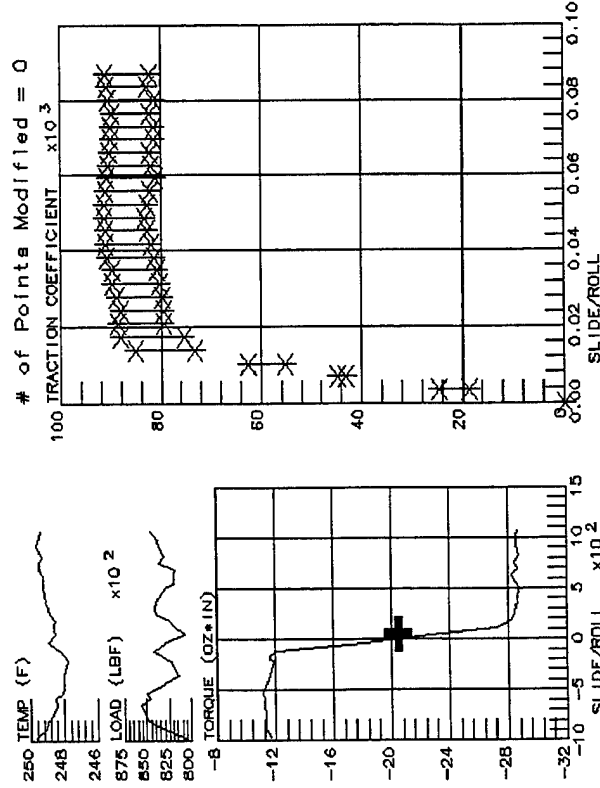
CO 90-715 ~220 Hatcol 3110 #141
250F 20LBF 306RPM 8 FILE: co20-301



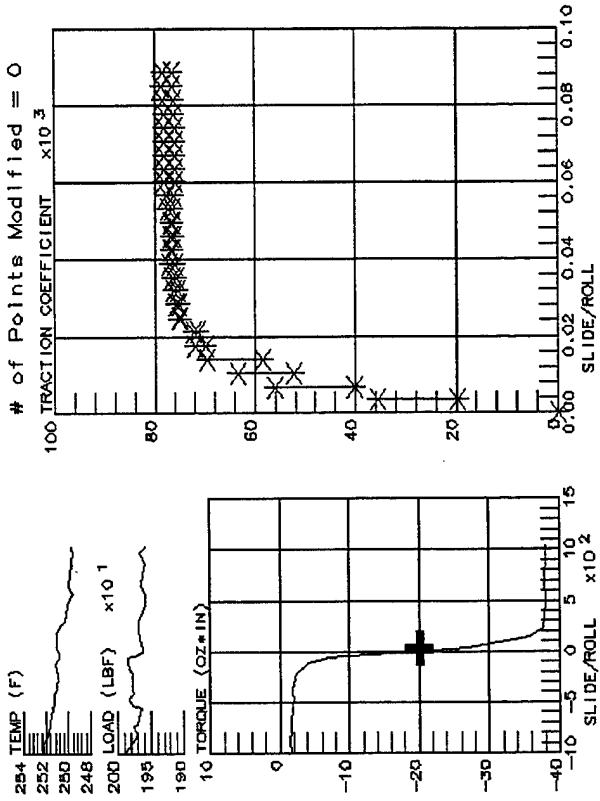
CO 90-715 ~220 Hatcol 3110 #142
250F 38LBF 306RPM 9 FILE: co20-301



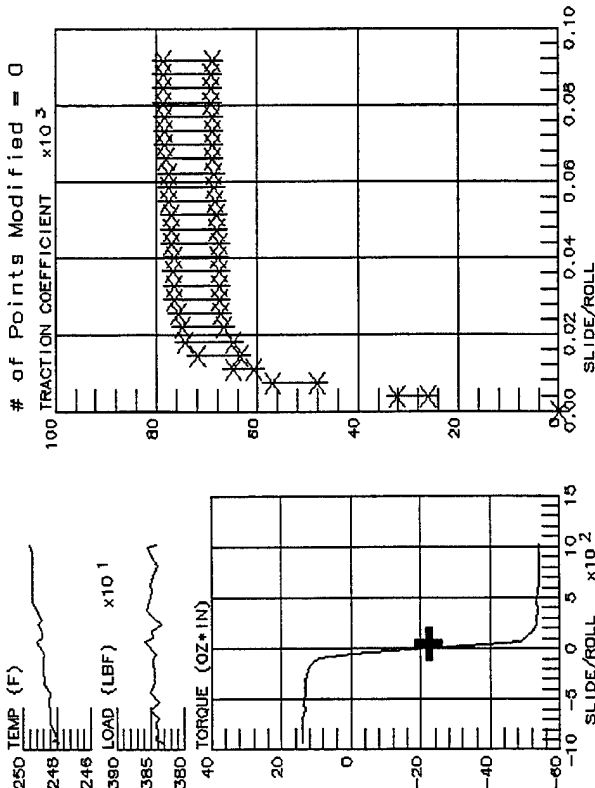
CO 90-715 ~220 Hatcol 3110 #143
250F 6LBF 651RPM 10 FILE: co20-301



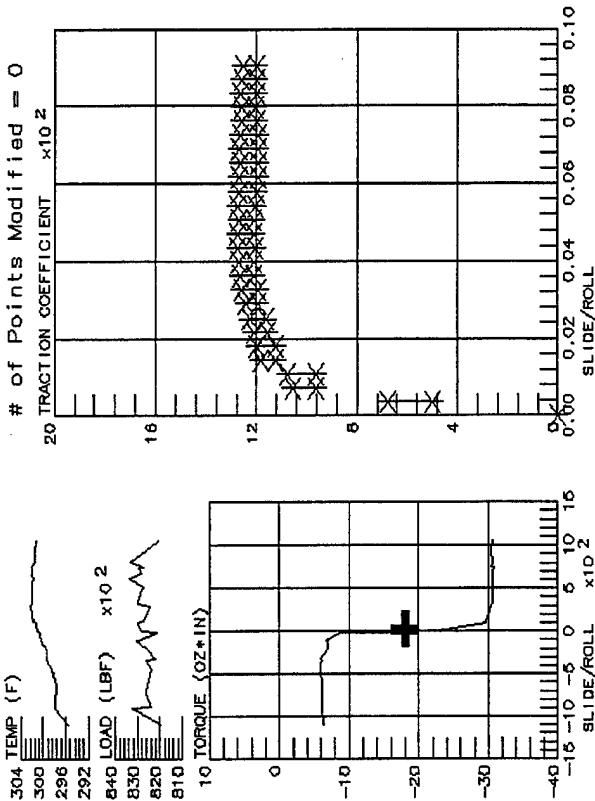
CO 90-715 ~220 Hatcol 3110 #144
250F 20LBF 651RPM 11 FILE: co20-301



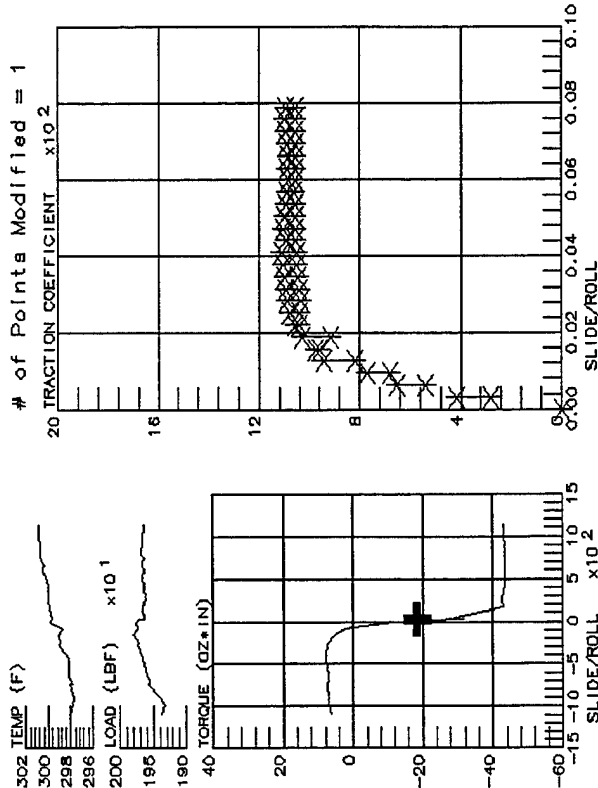
CO 90-715 ~220 Hatco 3110 #145
250F 38LBF 651RPM 12 FILE: co20-301



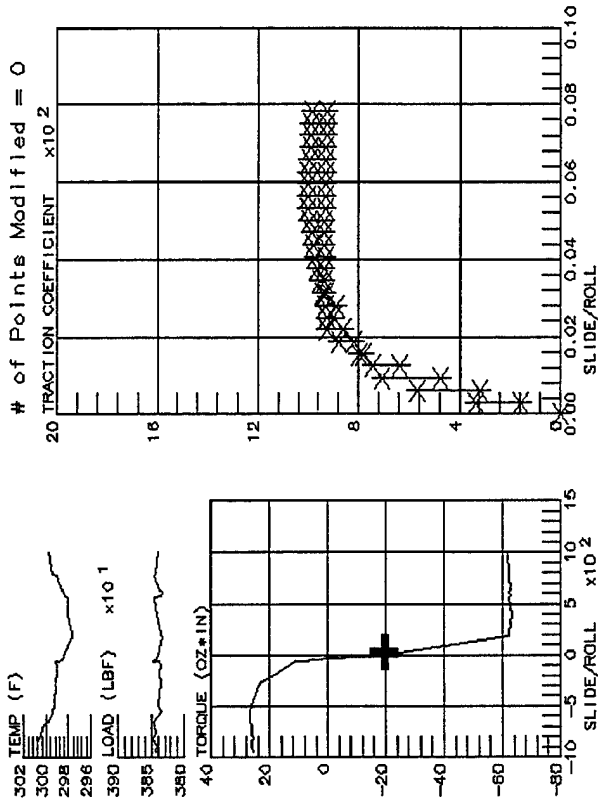
CO 90-715 ~220 Hatco 3110 #146
300F 8LBF 306RPM 13 FILE: co20-301



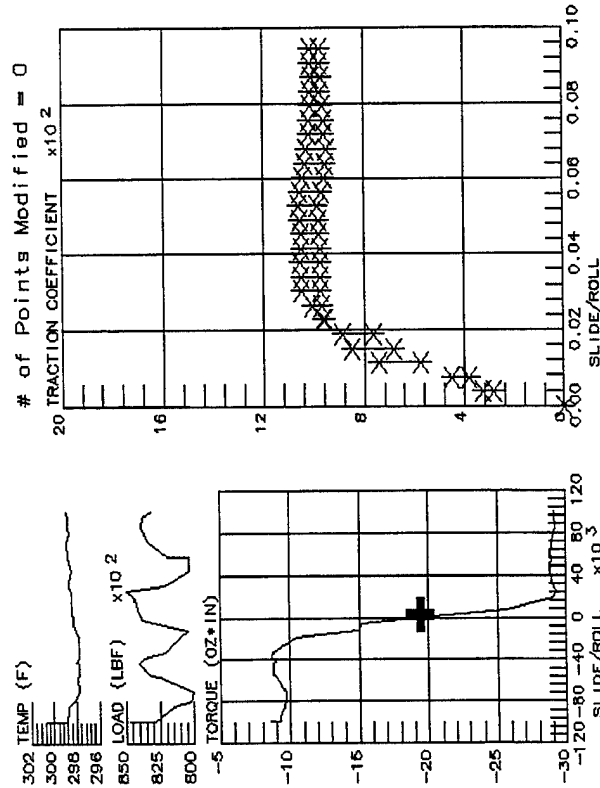
CO 90-715 ~220 Hatco 3110 #147
300F 20LBF 306RPM 14 FILE: co20-301



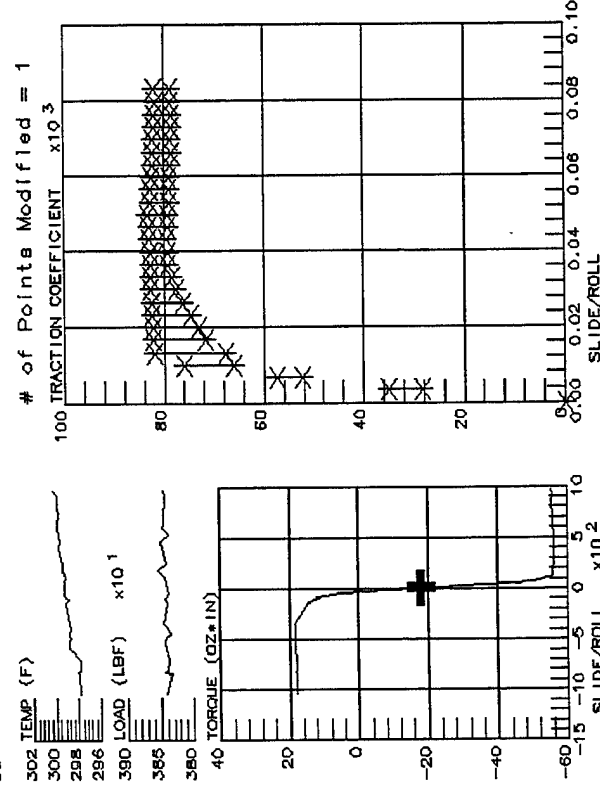
CO 90-715 ~220 Hatco 3110 #148
300F 38LBF 306RPM 15 FILE: co20-301



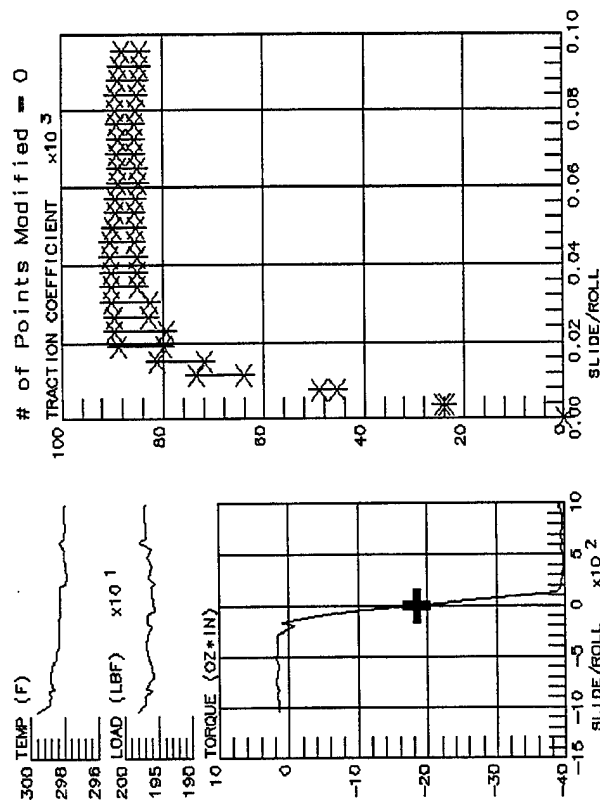
CO 90-715 ~220 Hatcol 3110 #149
300F 8LBF 651RPM 16 FILE: co20-301



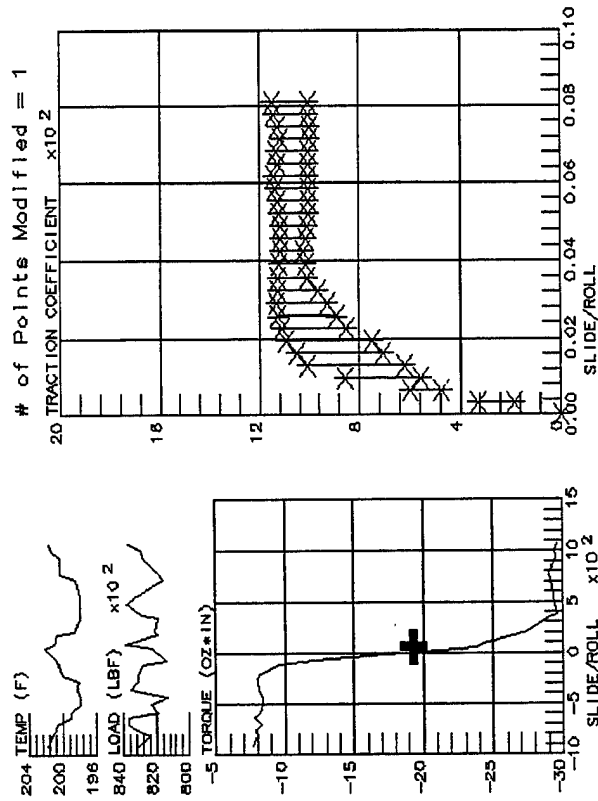
CO 90-715 ~220 Hatcol 3110 #151
300F 38LBF 651RPM 18 FILE: co20-301



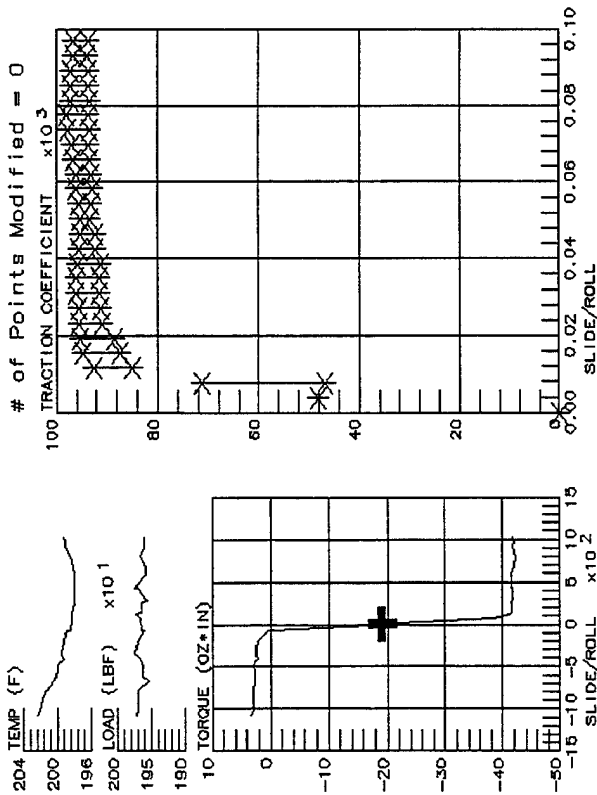
CO 90-715 ~220 Hatcol 3110 #150
300F 20LBF 651RPM 17 FILE: co20-301



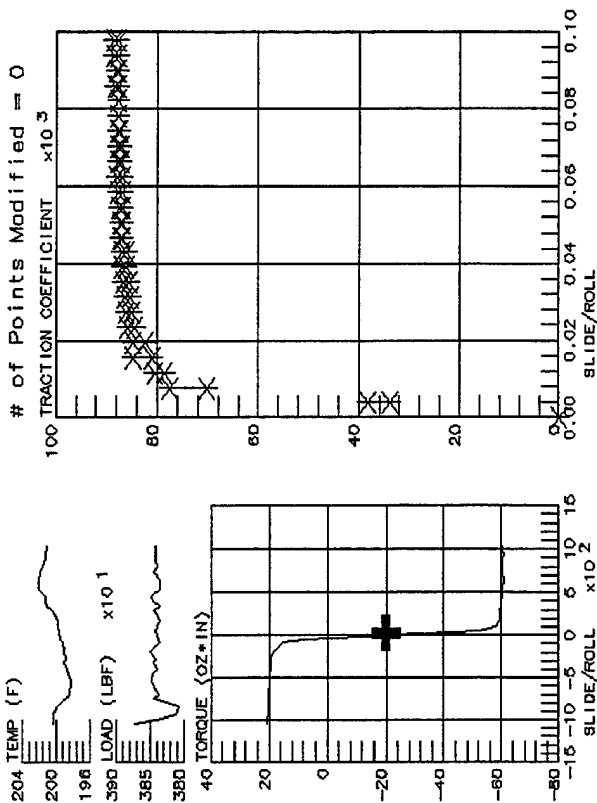
CO 90-715 ~220 Hatcol 3110 #152
200F 8LBF 306RPM 1 FILE: co20-30m



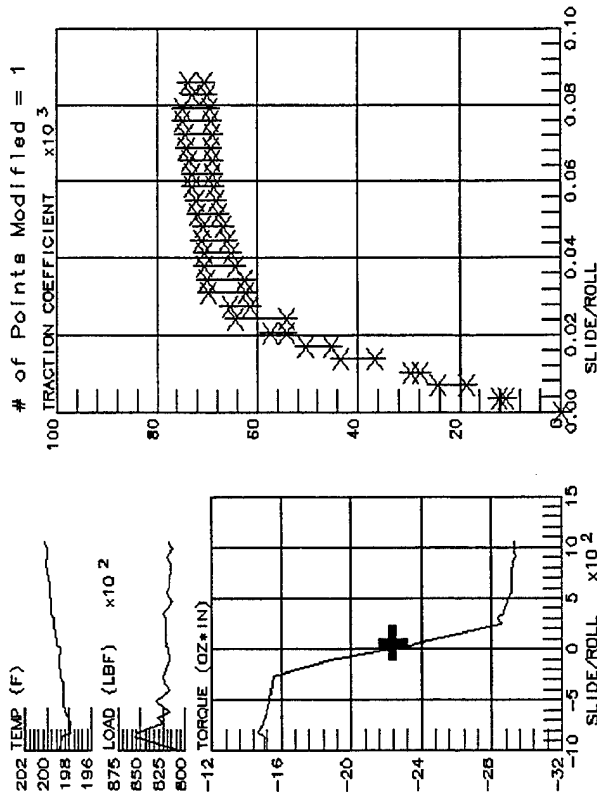
CO 90-715 ~220 Hatcol 3110 #153
200F 20LBF 306RPM 2 FILE: co20-30m



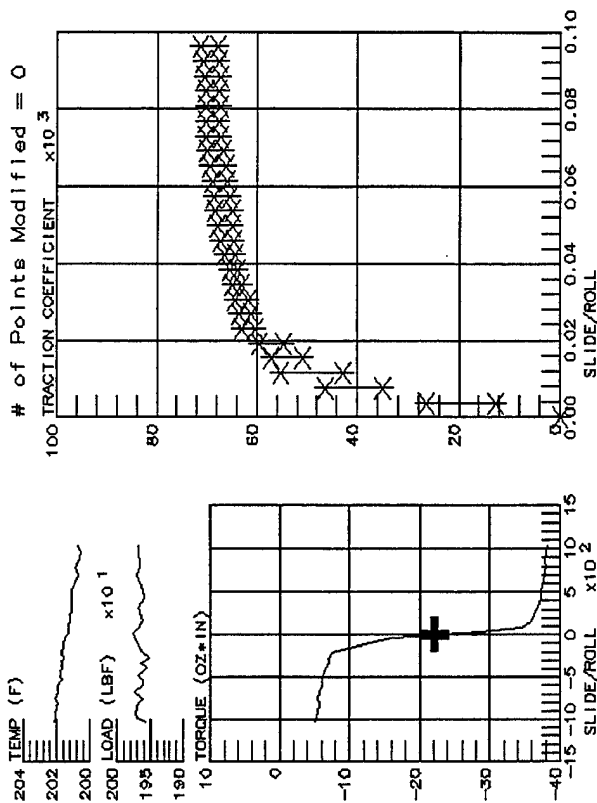
CO 90-715 ~220 Hatcol 3110 #154
200F 38LBF 306RPM 3 FILE: co20-30m



CO 90-715 ~220 Hatcol 3110 #155
200F 8LBF 651RPM 4 FILE: co20-30m

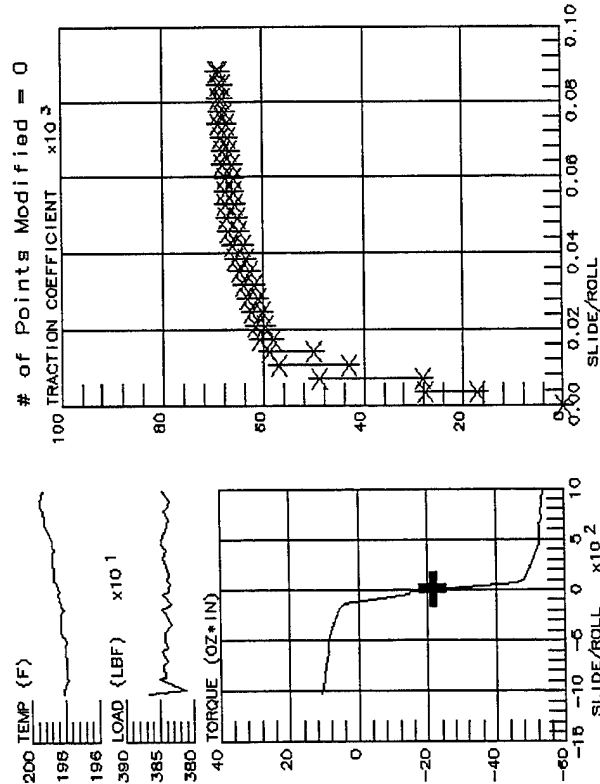


CO 90-715 ~220 Hatcol 3110 #156
200F 20LBF 651RPM 5 FILE: co20-30m

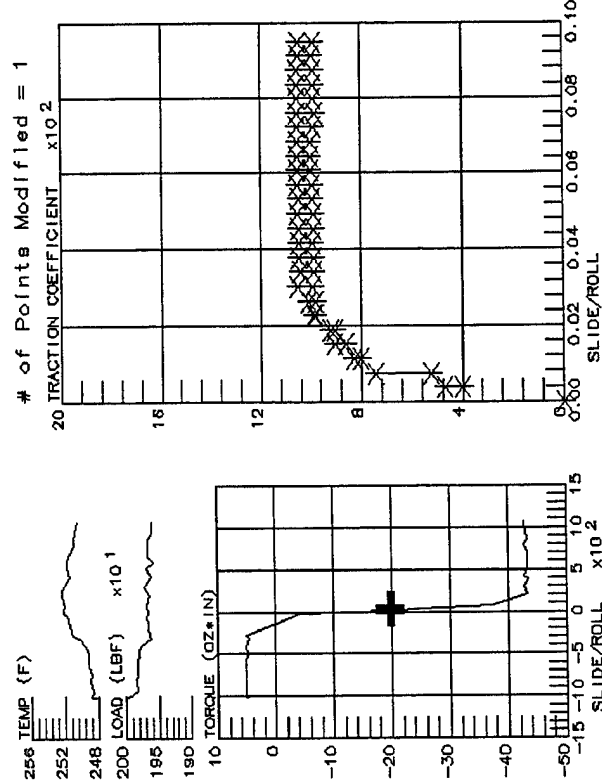


TRACTION MODIFIERS

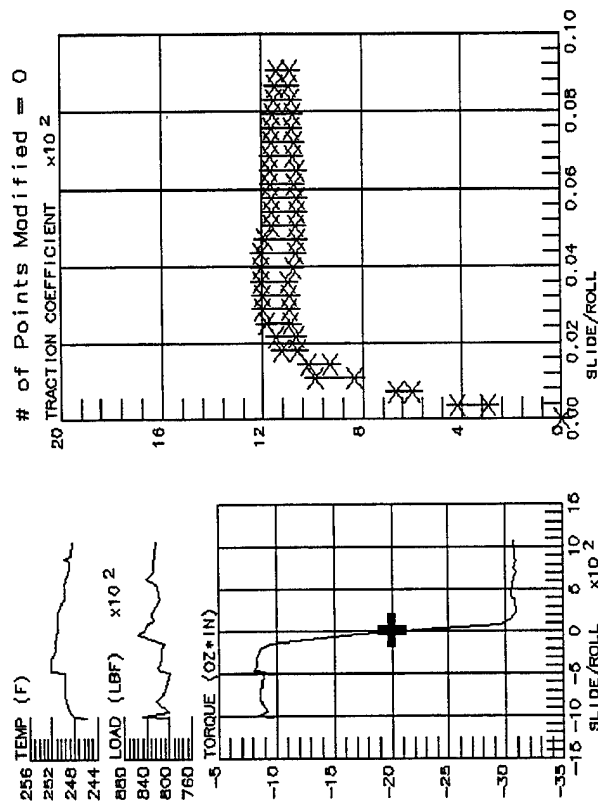
CO 90-715 ~220 Hatcol 3110 #157
250F 38LBF 651RPM 6 FILE: co20-30m



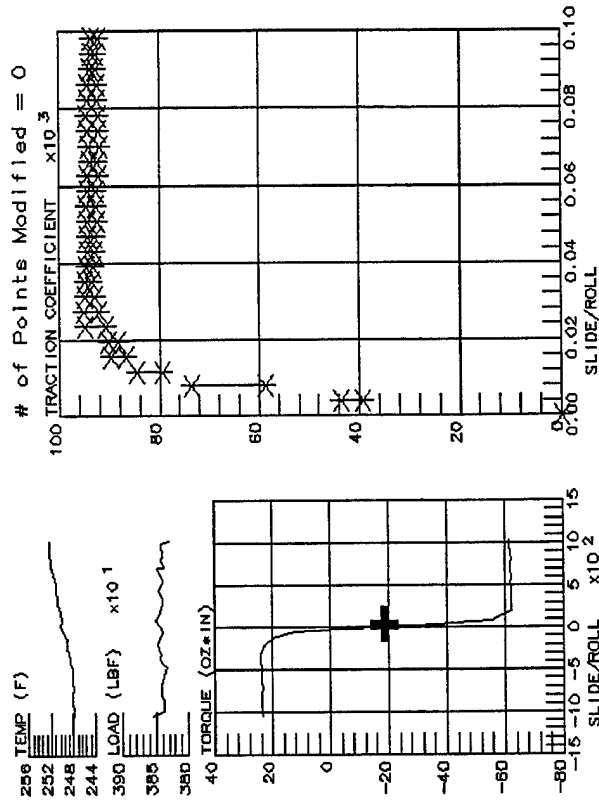
CO 90-715 ~220 Hatcol 3110 #159
250F 20LBF 306RPM 8 FILE: co20-30m



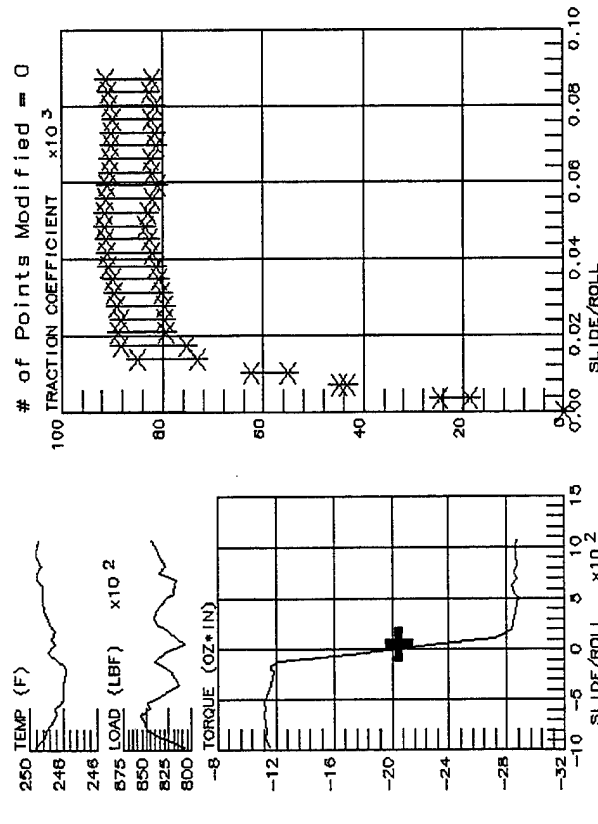
CO 90-715 ~220 Hatcol 3110 #158
250F 8LBF 306RPM 7 FILE: co20-30m



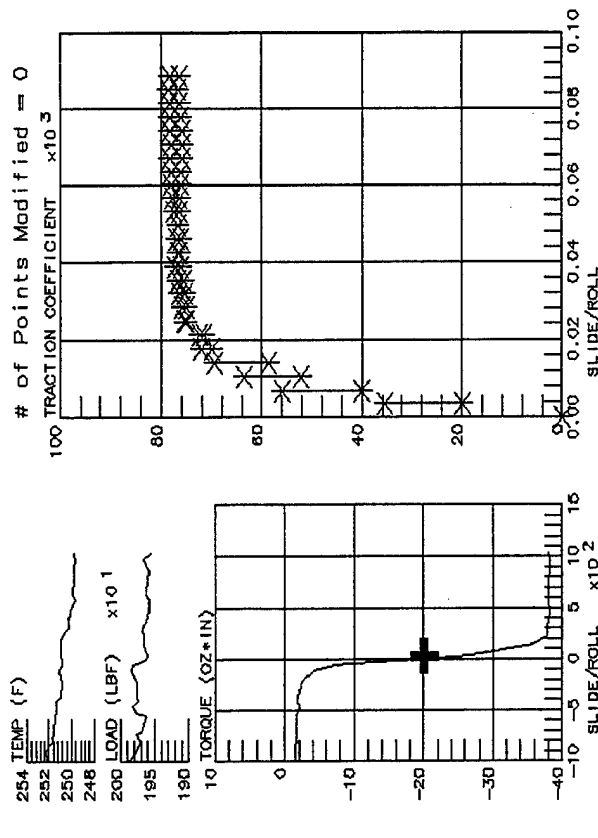
CO 90-715 ~220 Hatcol 3110 #160
250F 38LBF 306RPM 9 FILE: co20-30m



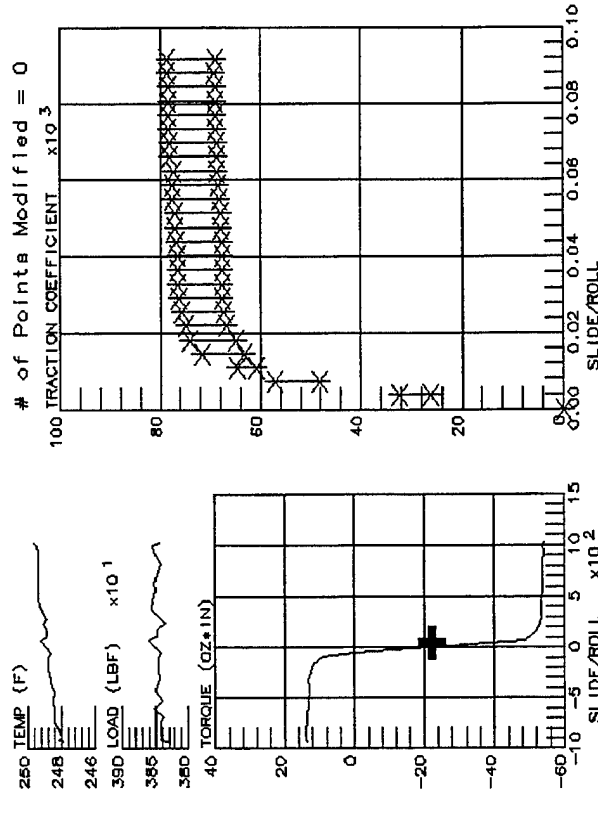
CO 90-715 ~220 Hatcol 3110 #161
250F 8LBF 65RPM 10 FILE: co20-30m



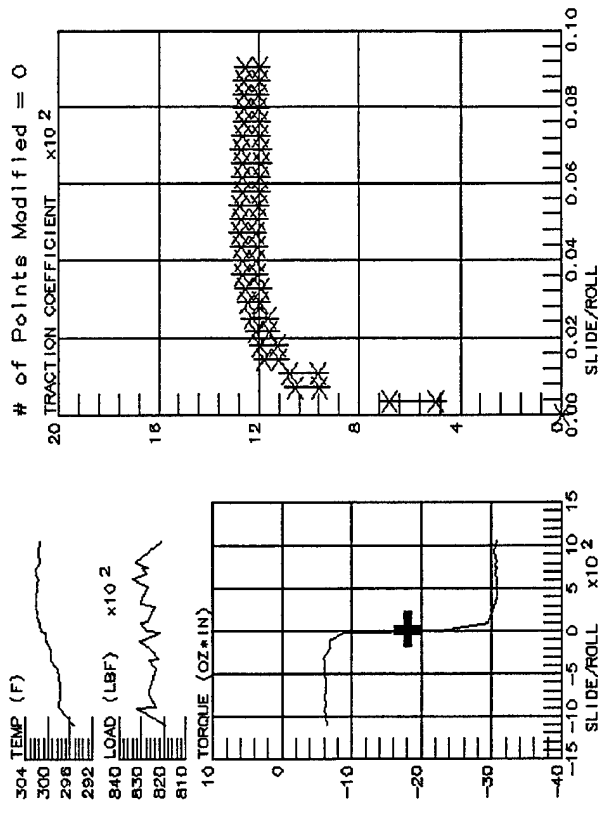
CO 90-715 ~220 Hatcol 3110 #162
250F 20LBF 65RPM 11 FILE: co20-30m

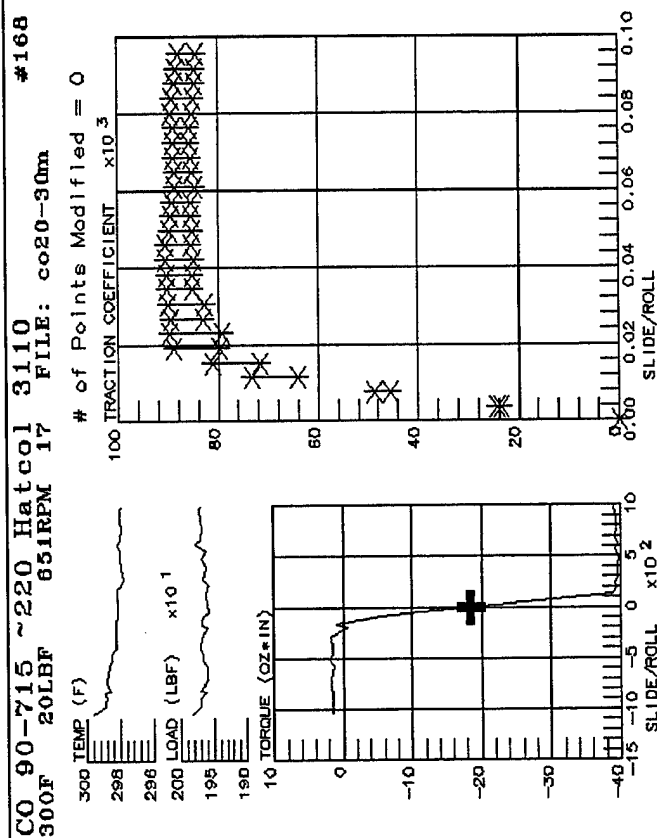
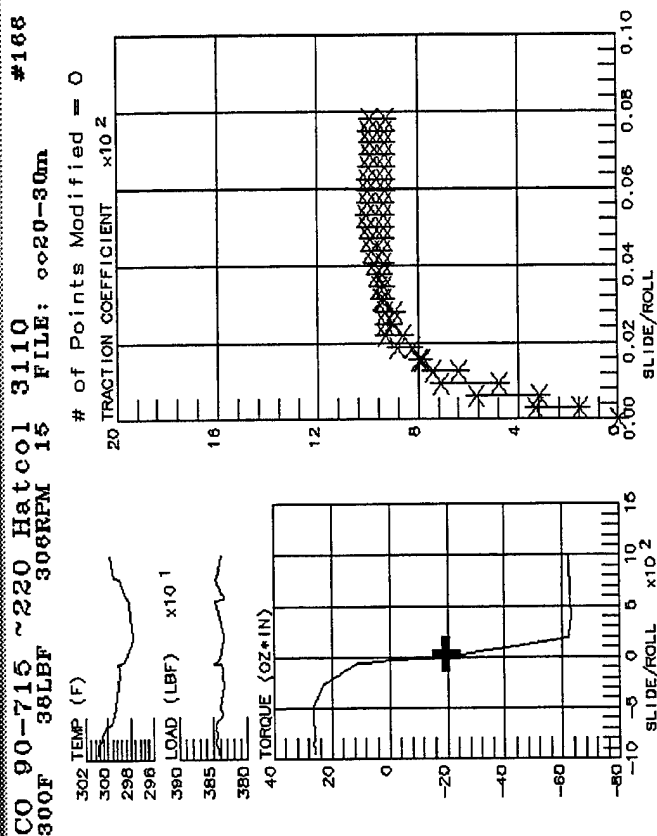
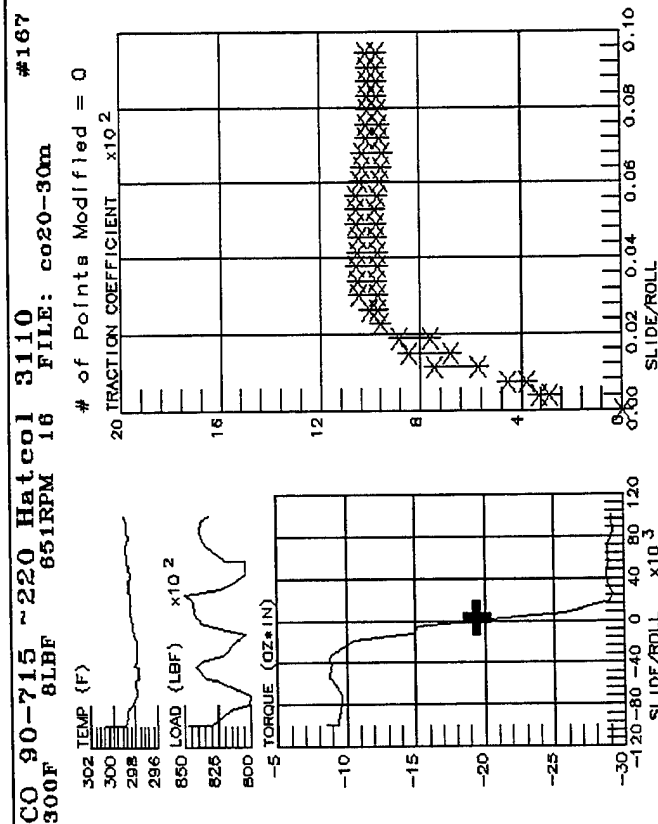
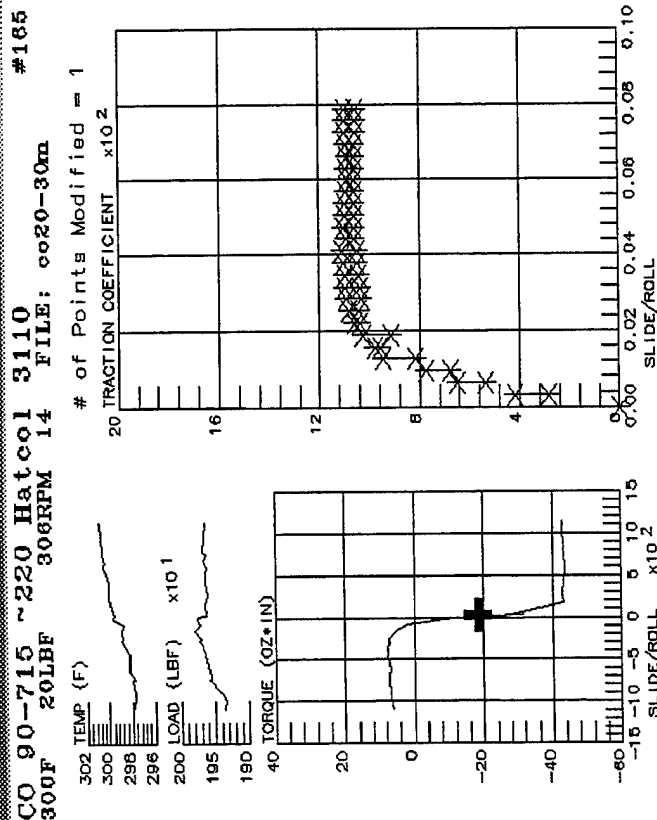


CO 90-715 ~220 Hatcol 3110 #163
250F 38LBF 65RPM 12 FILE: co20-30m

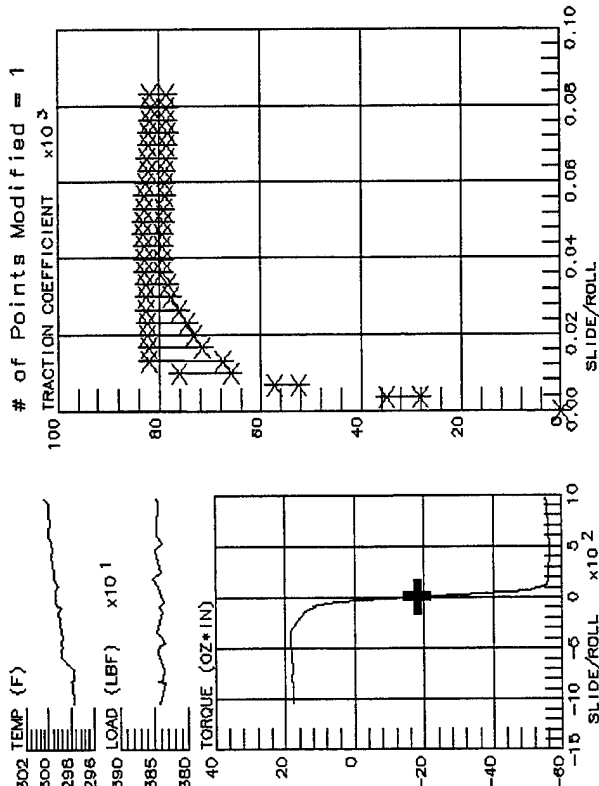


CO 90-715 ~220 Hatcol 3110 #164
300F 8LBF 306RPM 13 FILE: co20-30m

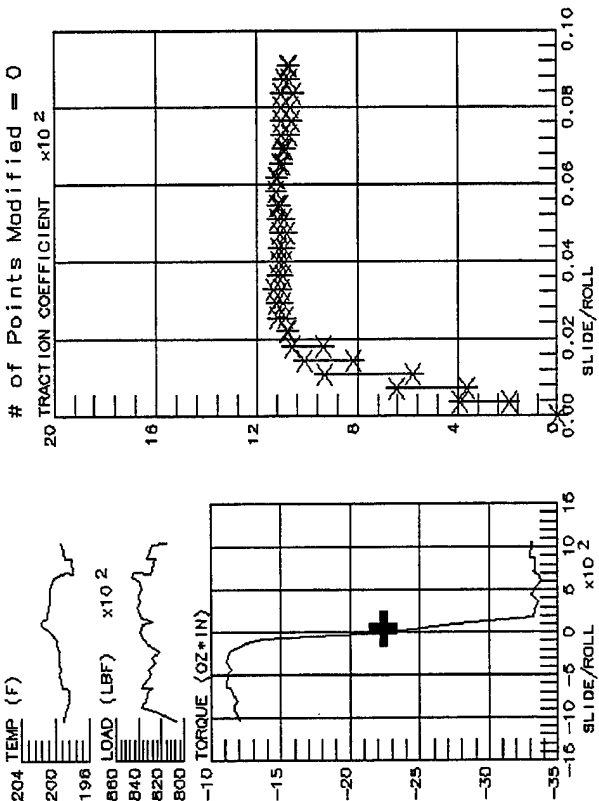




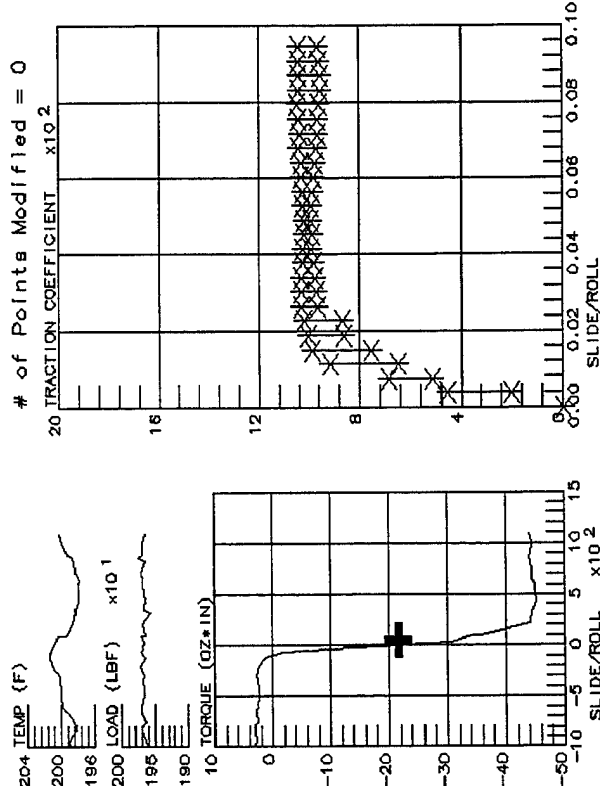
CO 90-715 ~220 Hatcol 3110 #169
300F 38LBF 651RPM 18 FILE: co20-30m



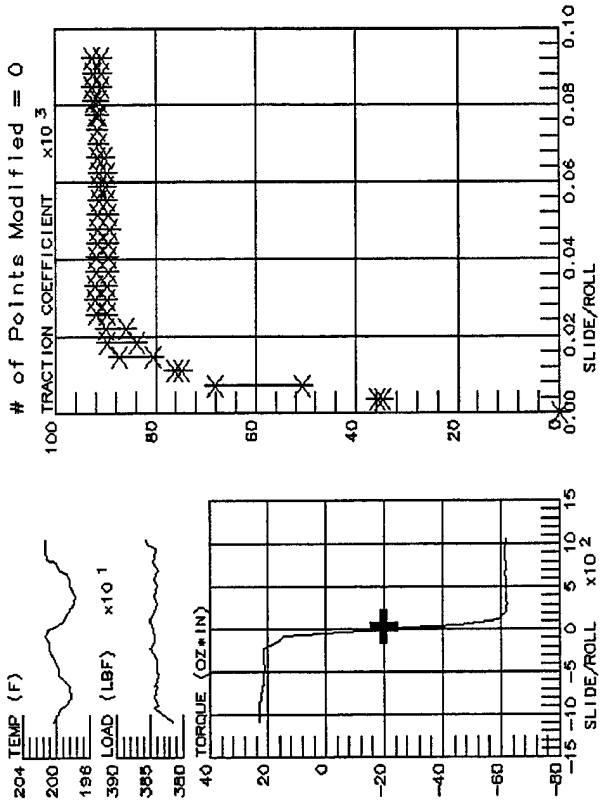
CO 90-715 ~220 Hatcol 3110 #170
200F 8LBF 306RPM 1 FILE: co200v1



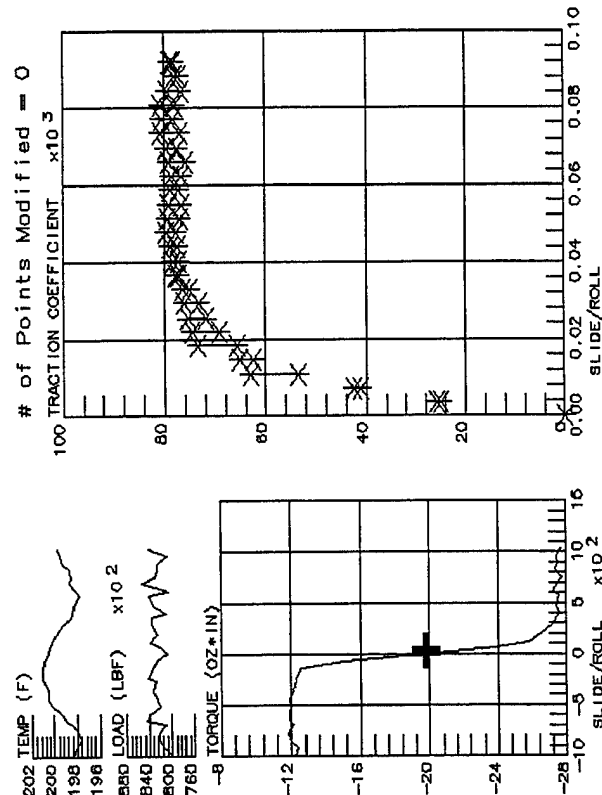
CO 90-715 ~220 Hatcol 3110 #171
200F 20LBF 306RPM 2 FILE: co200v1



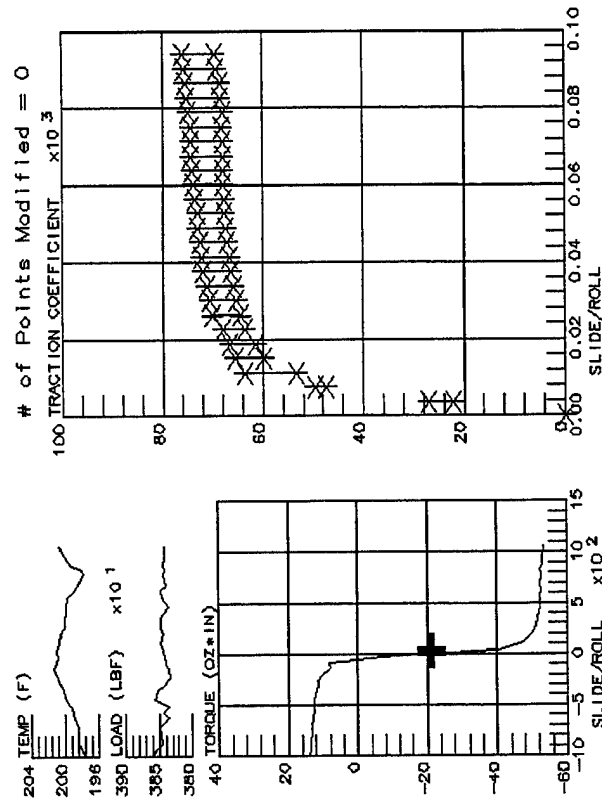
CO 90-715 ~220 Hatcol 3110 #172
200F 38LBF 306RPM 3 FILE: co200v1



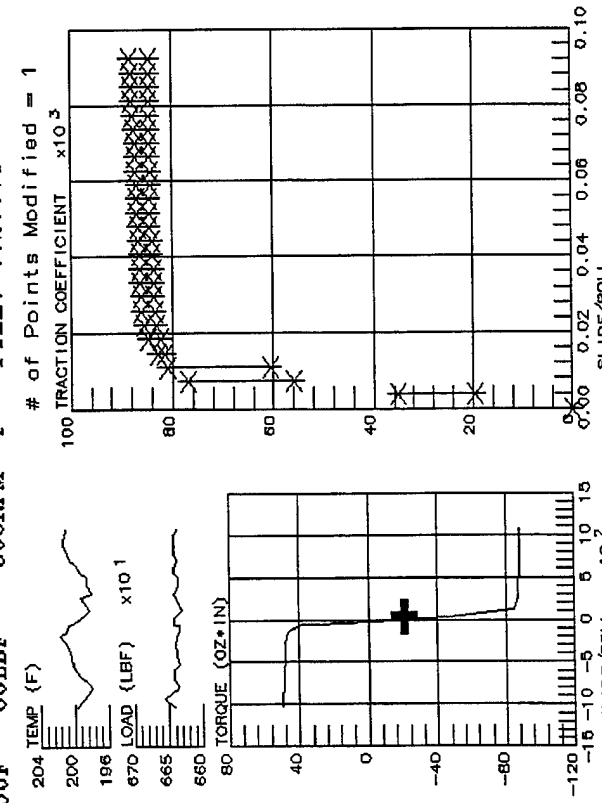
CO 90-715 ~220 Hatcol 3110 #174
200F 8LBF 651RPM 5 FILE: co200v1



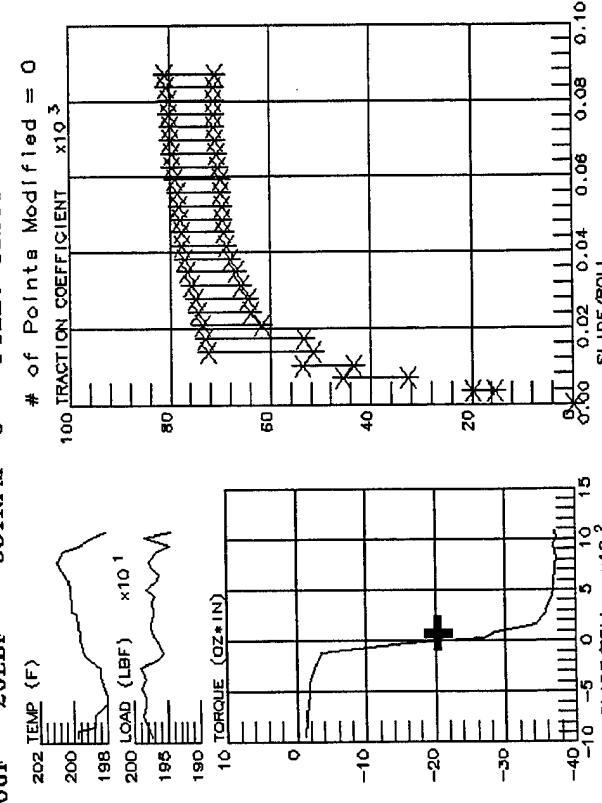
CO 90-715 ~220 Hatcol 3110 #175
200F 38LBF 651RPM 7 FILE: co200v1



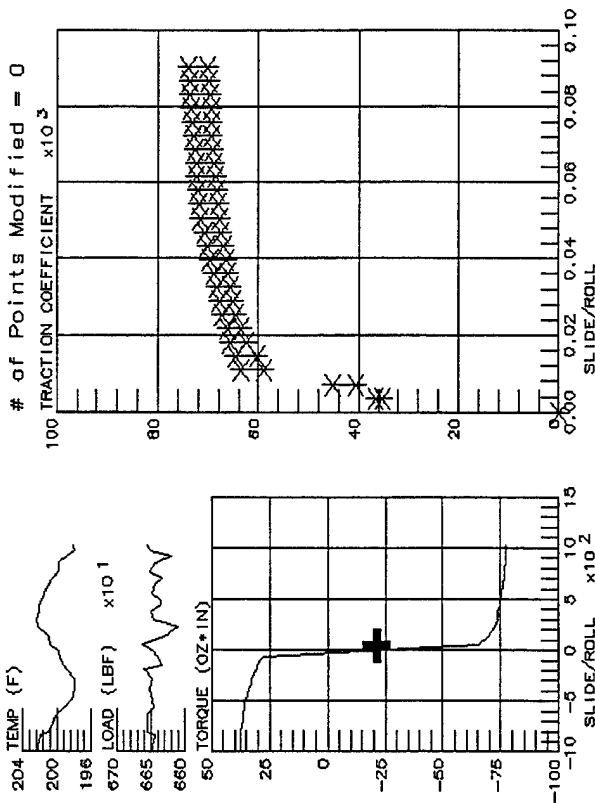
CO 90-715 ~220 Hatcol 3110 #173
200F 66LBF 306RPM 4 FILE: co200v1



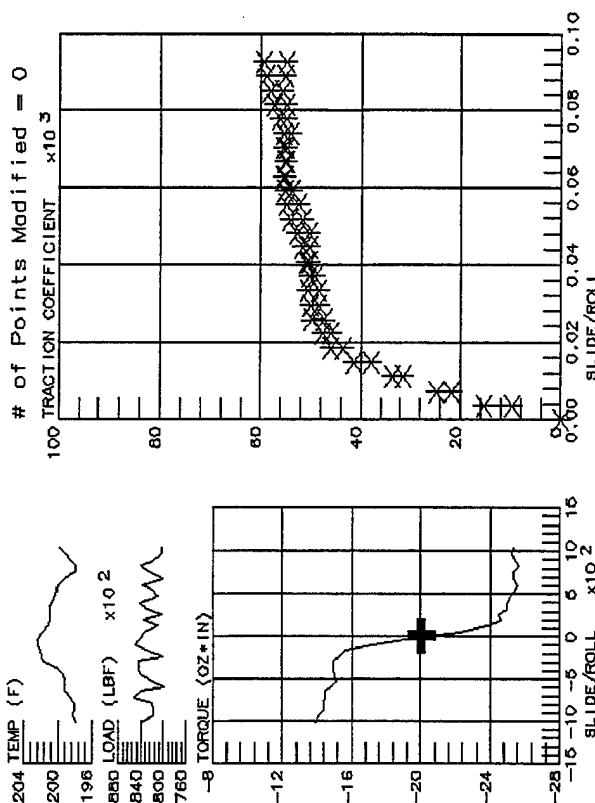
CO 90-715 ~220 Hatcol 3110 #176
200F 20LBF 651RPM 6 FILE: co200v1



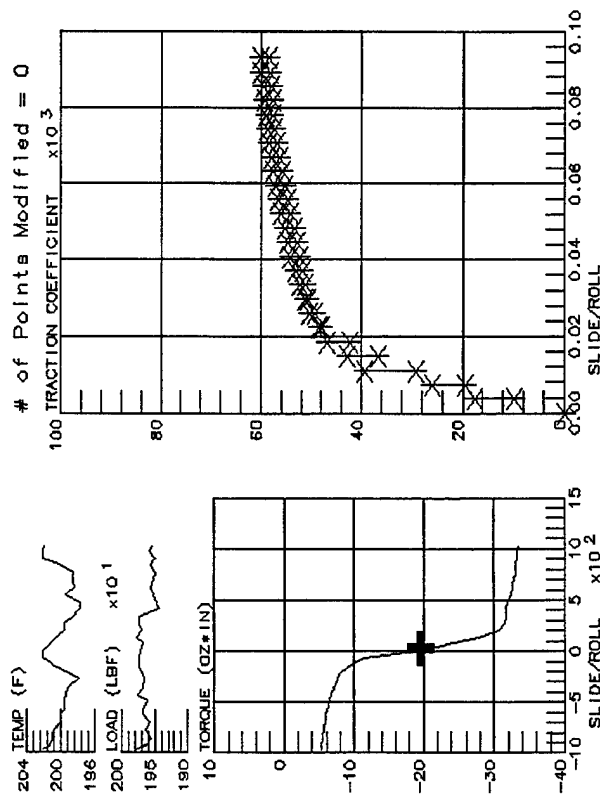
CO 90-715 ~220 Hatcol 3110 #177
200F 66LBF 651RPM 8 FILE: co200v1



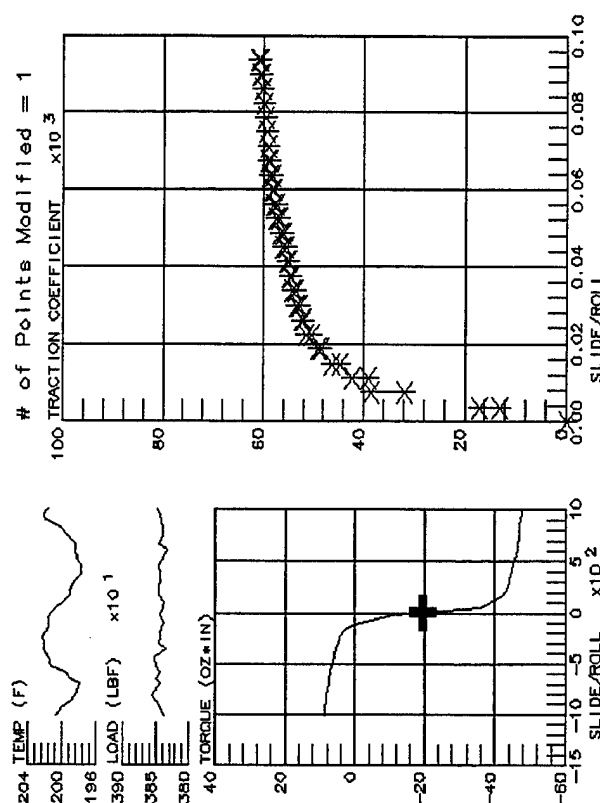
CO 90-715 ~220 Hatcol 3110 #178
200F 8LBF 1264RPM 9 FILE: co200v1



CO 90-715 ~220 Hatcol 3110 #179
200F 20LBF 1264RPM 10 FILE: co200v1

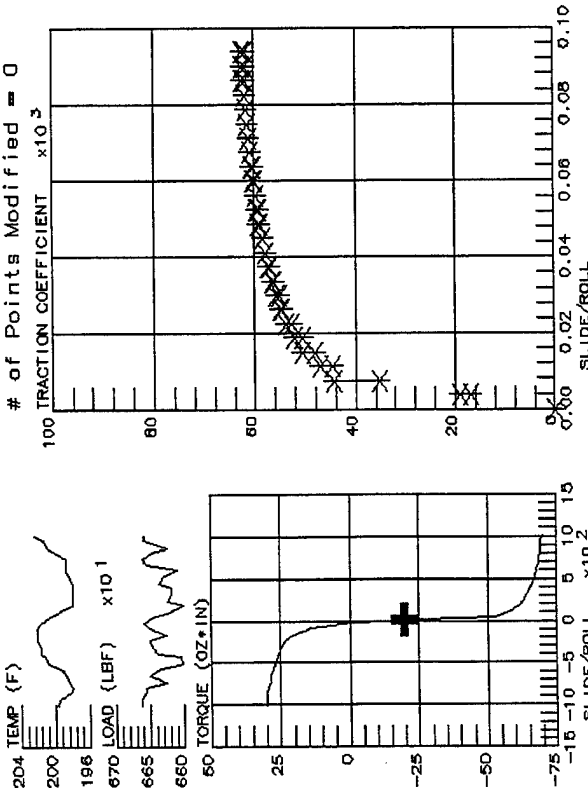


CO 90-715 ~220 Hatcol 3110 #180
200F 38LBF 1264RPM 11 FILE: co200v1



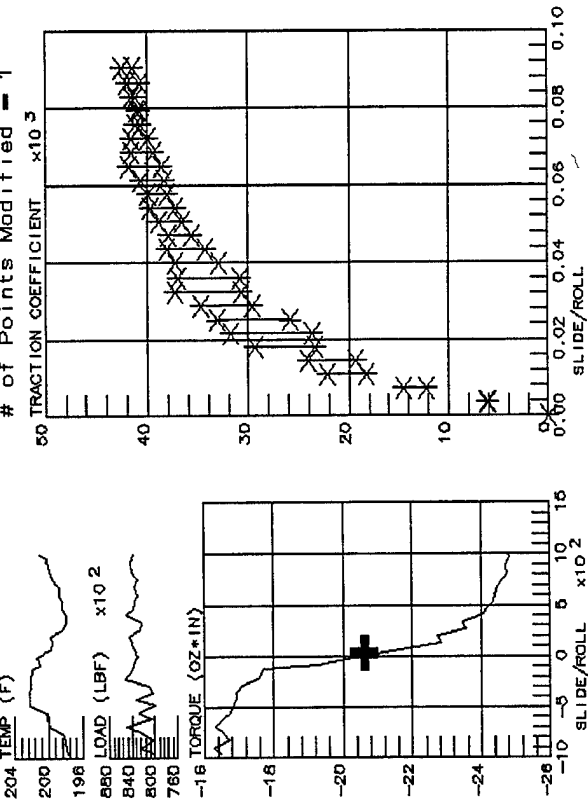
CO 90-715 ~220 Hatcol 3110 #181
200F 66LBF 1264RPM 12 FILE: co200v1

of Points Modified = 0



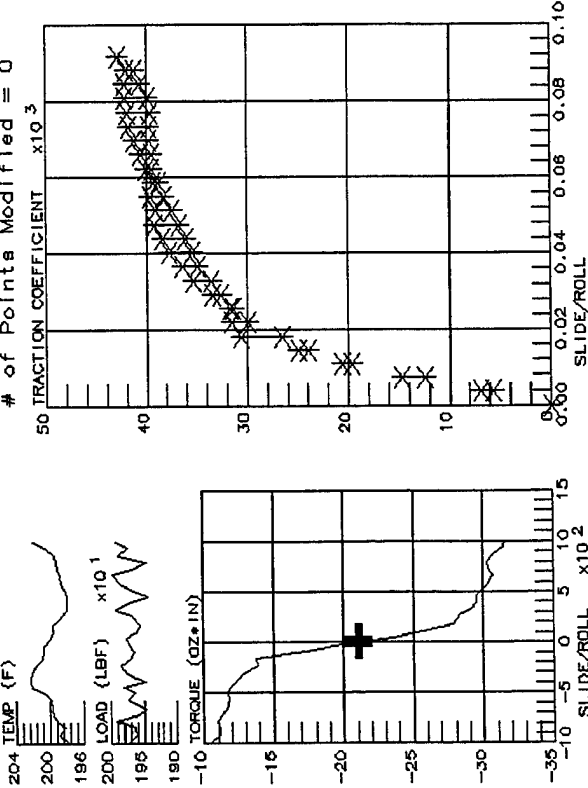
CO 90-715 ~220 Hatcol 3110 #182
200F 8LBF 2563RPM 13 FILE: co200v1

of Points Modified = 1



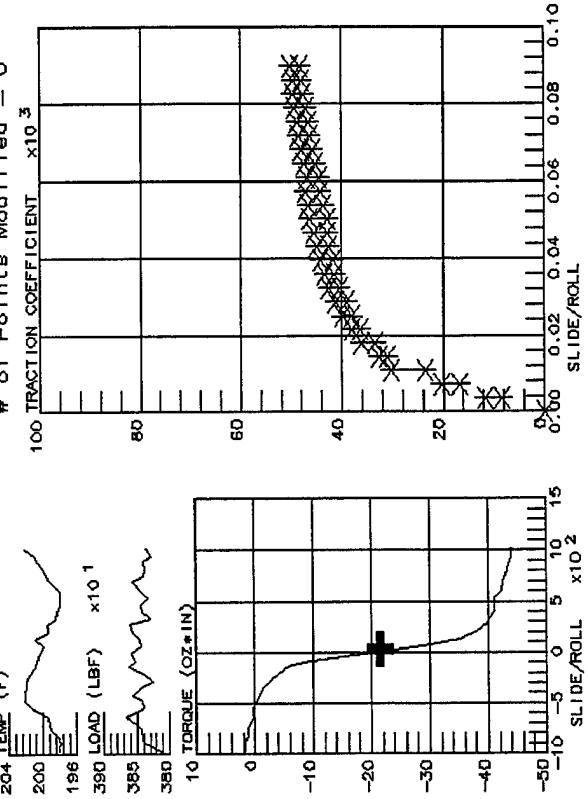
CO 90-715 ~220 Hatcol 3110 #183
200F 20LBF 2563RPM 14 FILE: co200v1

of Points Modified = 0



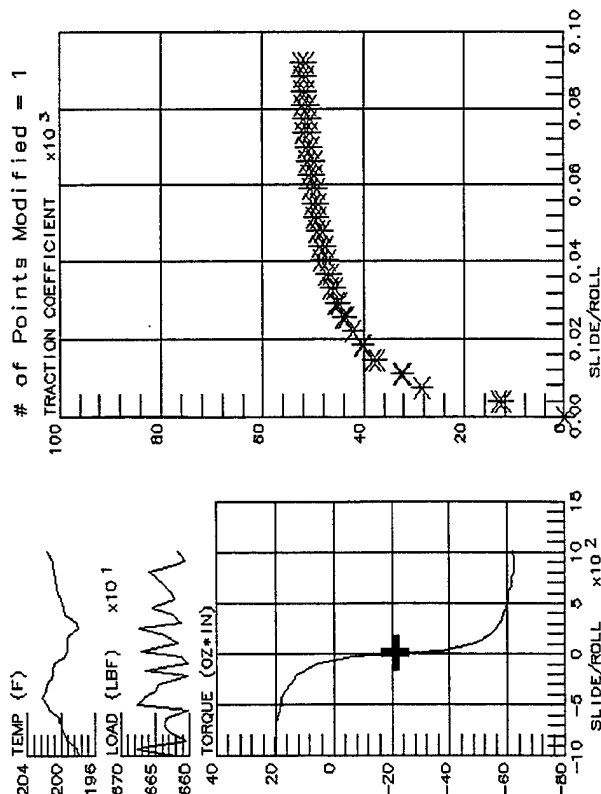
CO 90-715 ~220 Hatcol 3110 #184
200F 38LBF 2563RPM 15 FILE: co200v1

of Points Modified = 0



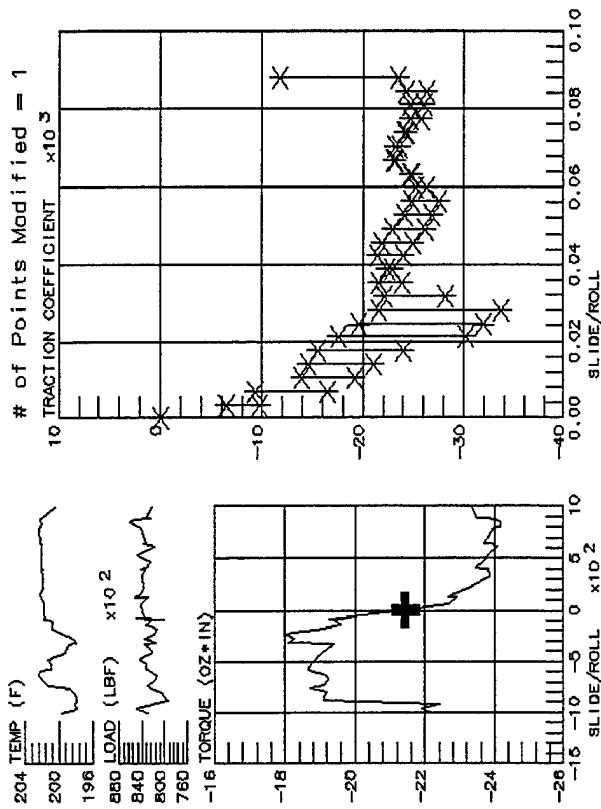
CO 90-715 ~220 Hatcol 3110 #185
200F 66LBF 2563RPM 16 FILE: co200v1

of Points Modified = 1



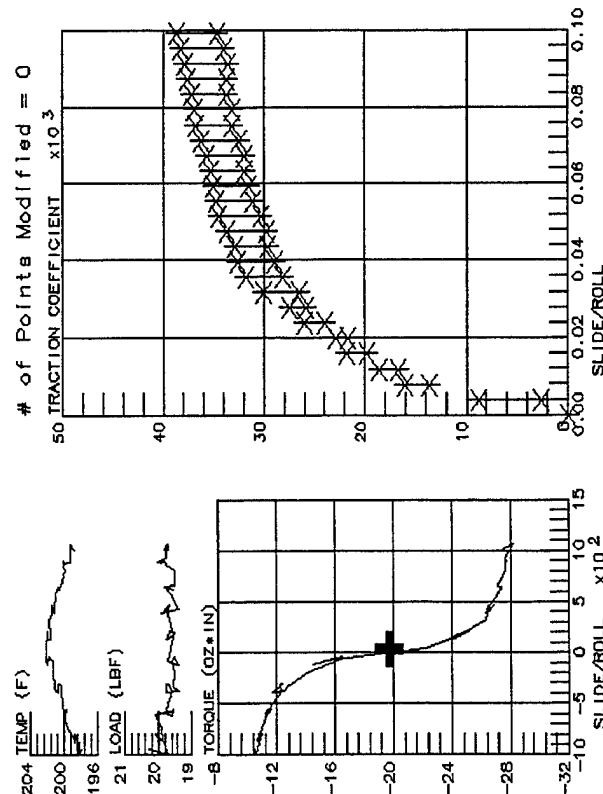
CO 90-715 ~220 Hatcol 3110 #186
200F 8LBF 5097RPM 1 FILE: co200vh

of Points Modified = 1



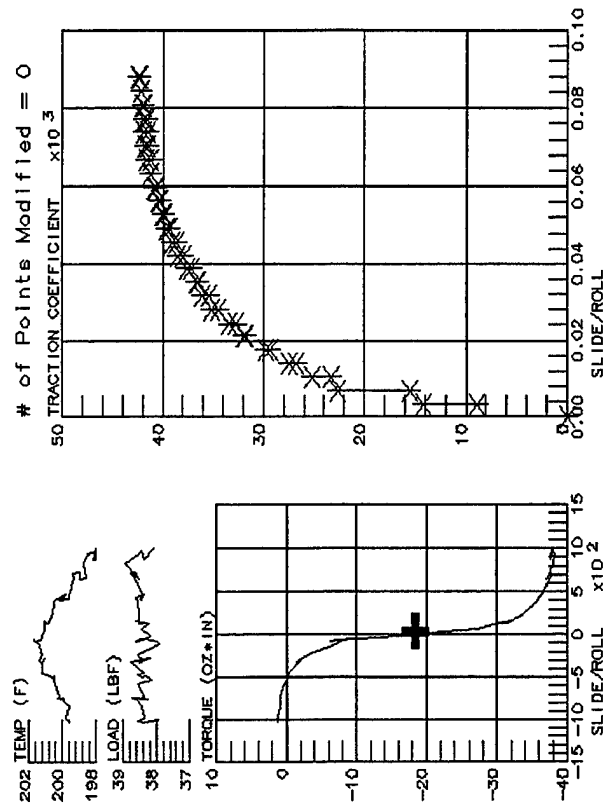
CO 90-715 ~220 Hatcol 3110 #187
200F 20LBF 5097RPM 2 FILE: co200vh

of Points Modified = 0



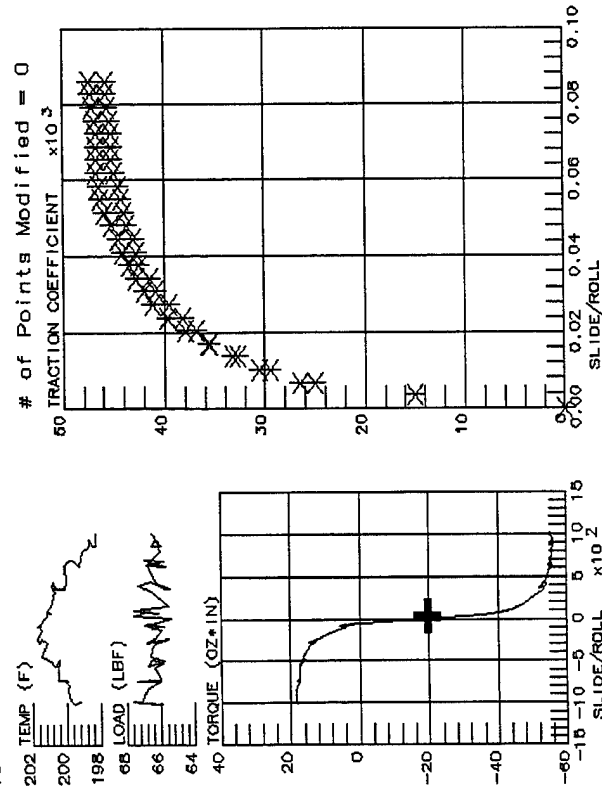
CO 90-715 ~220 Hatcol 3110 #188
200F 36LBF 5097RPM 3 FILE: co200vh

of Points Modified = 0



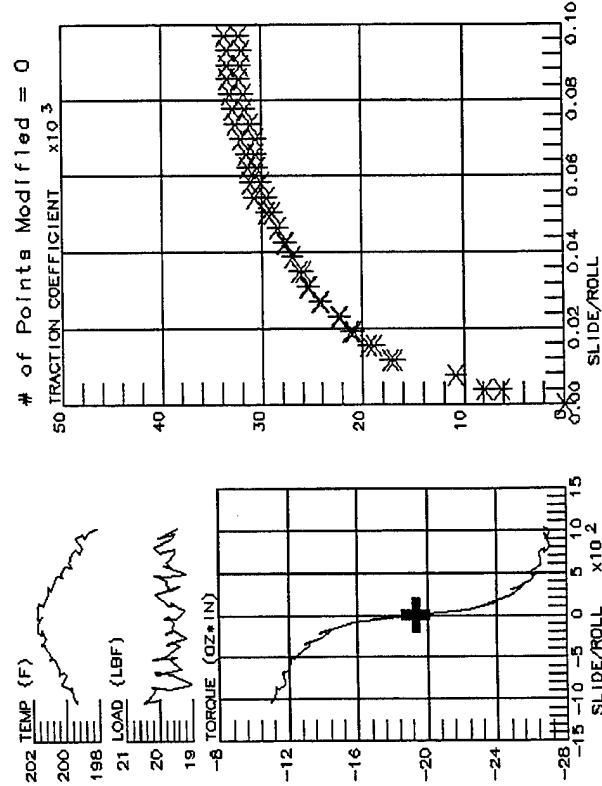
CO 90-715 ~220 Hatcol 3110 #189
200F 66LBF 5097RPM 4 FILE: co200vh

of Points Modified = 0



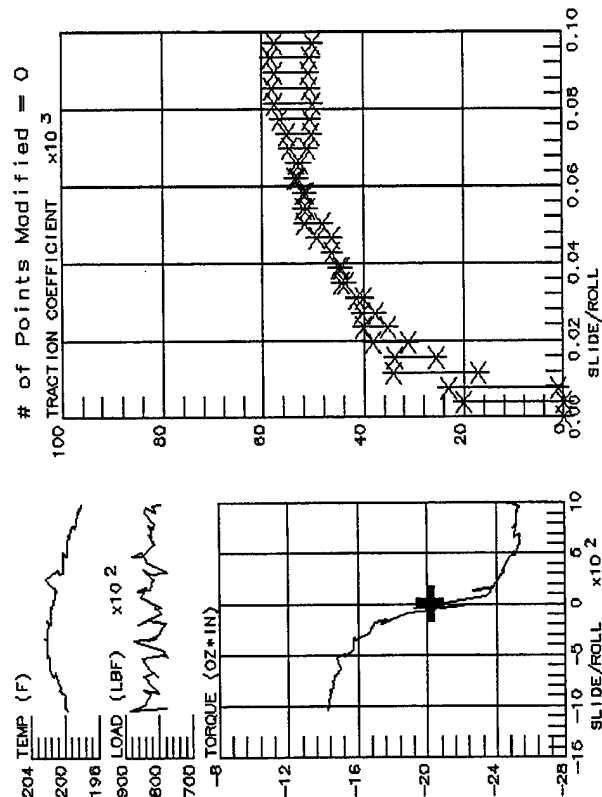
CO 90-715 ~220 Hatcol 3110 #191
200F 20LBF 7665RPM 6 FILE: co200vh

of Points Modified = 0



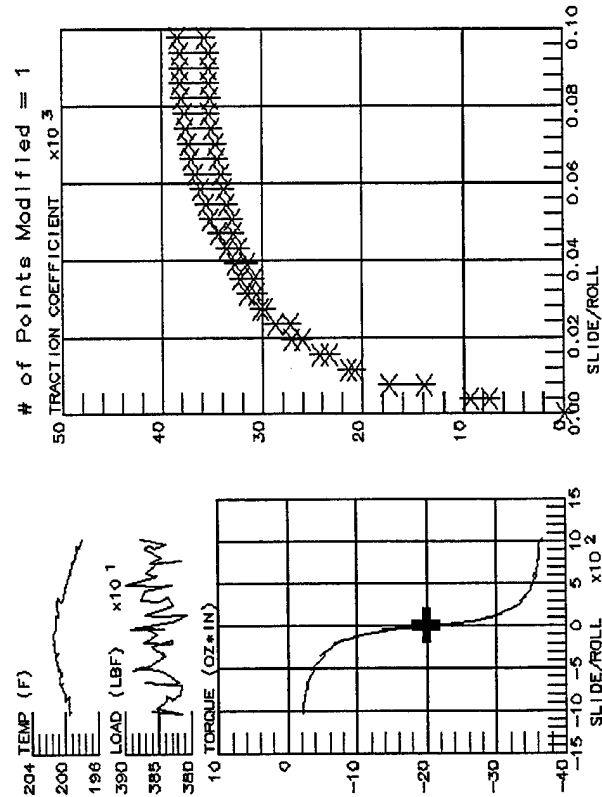
CO 90-715 ~220 Hatcol 3110 #190
200F 8LBF 7665RPM 5 FILE: co200vh

of Points Modified = 0



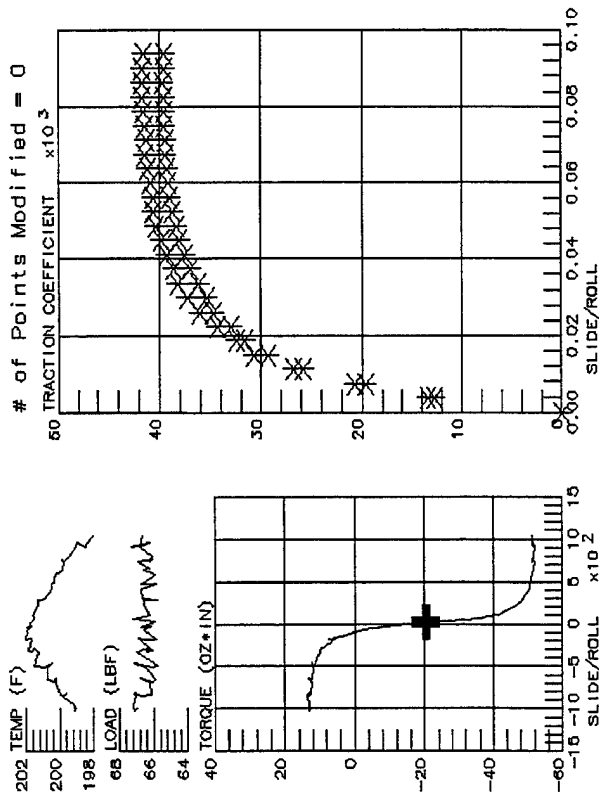
CO 90-715 ~220 Hatcol 3110 #192
200F 38LBF 7665RPM 7 FILE: co200vh

of Points Modified = 1

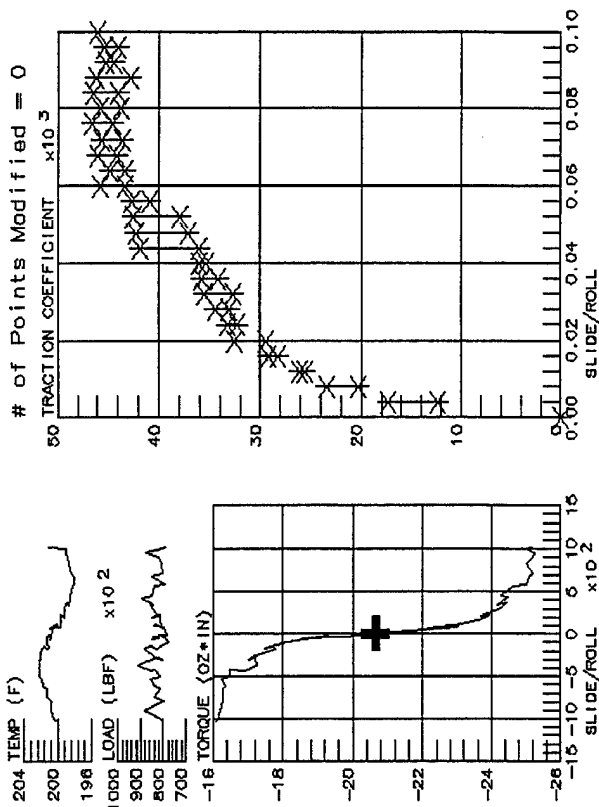


TRACTION MEASUREMENTS

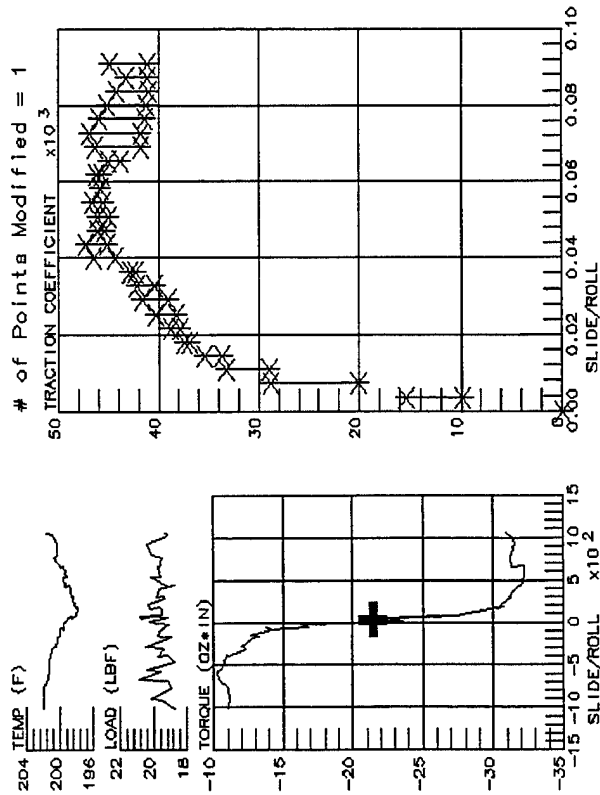
CO 90-715 ~220 Hatcol 3110 #193
200F 68LBF 7665RPM 8 FILE: co200vh



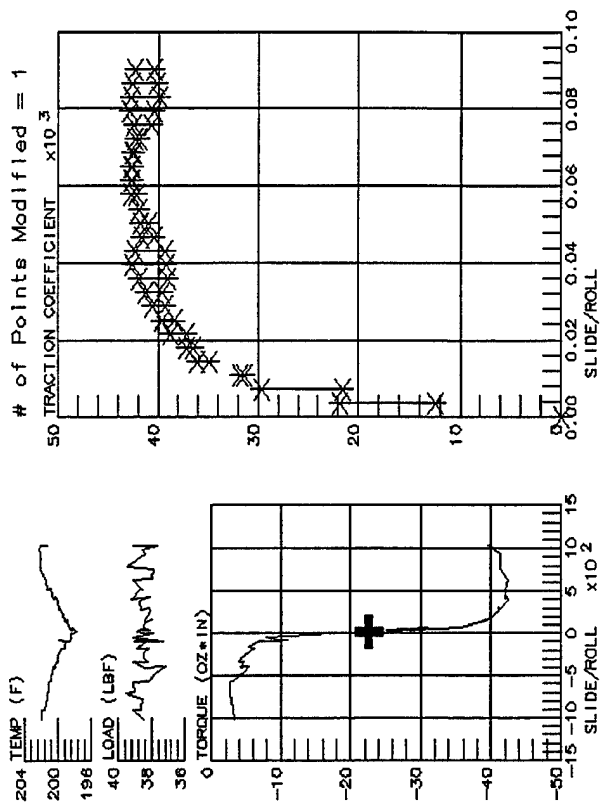
CO 90-715 ~220 Hatcol 3110 #194
200F 8LBF 10225RPM 9 FILE: co200vh

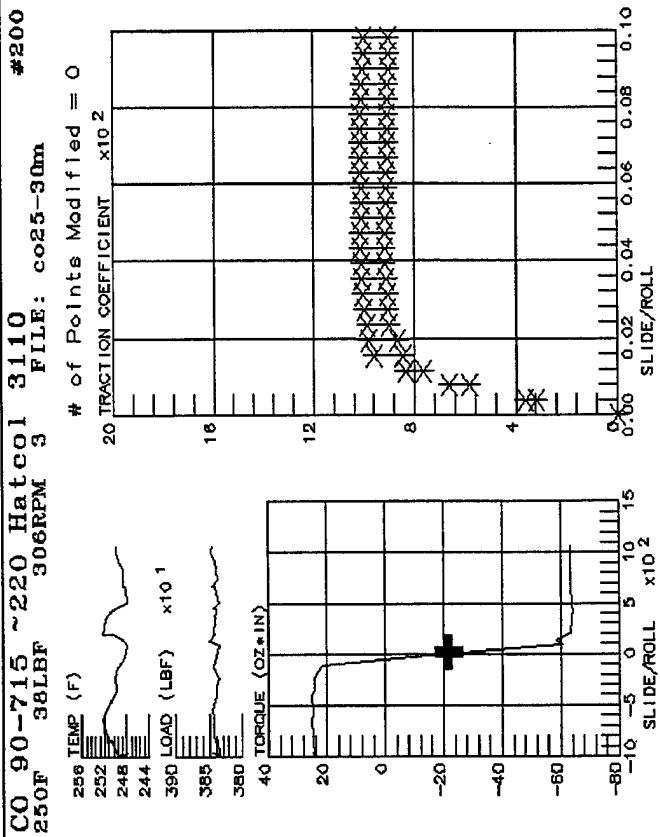
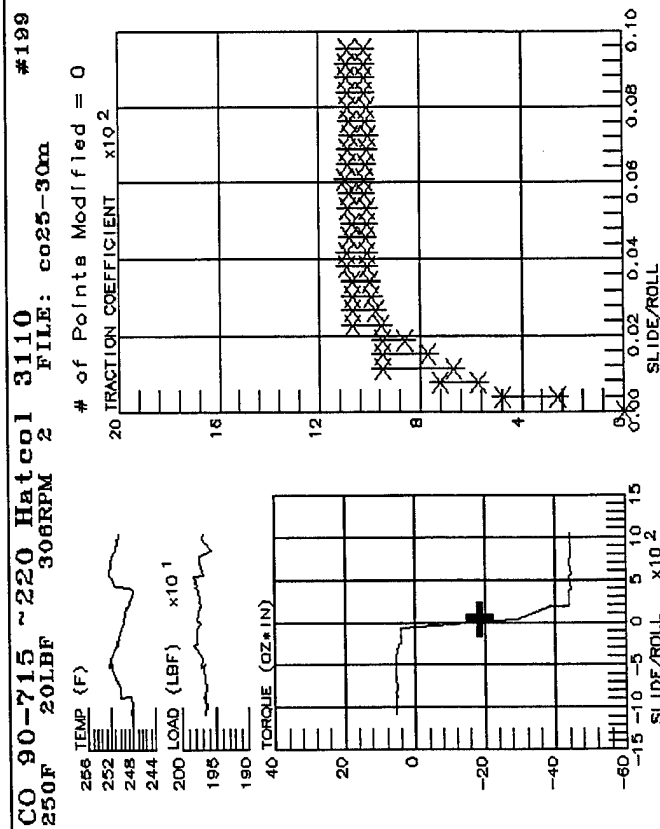
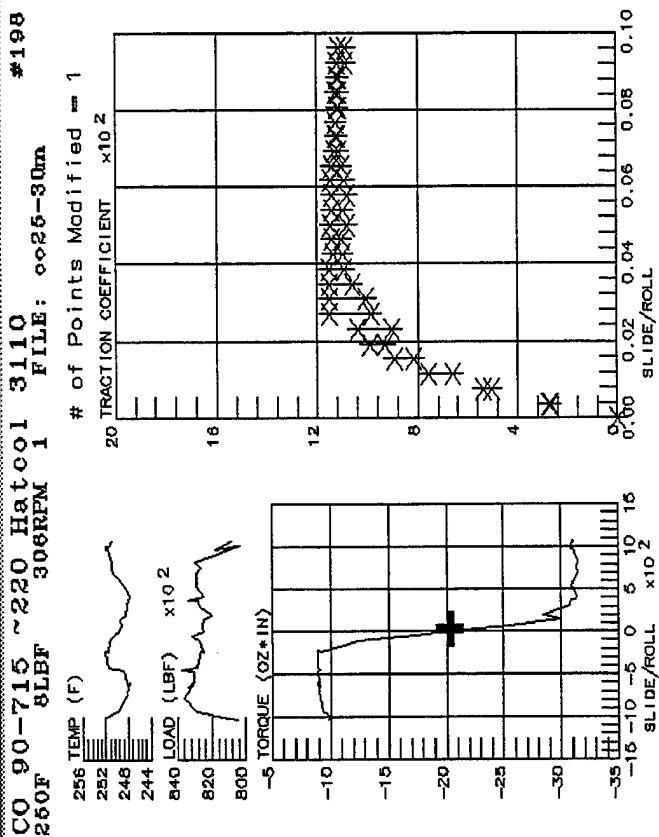
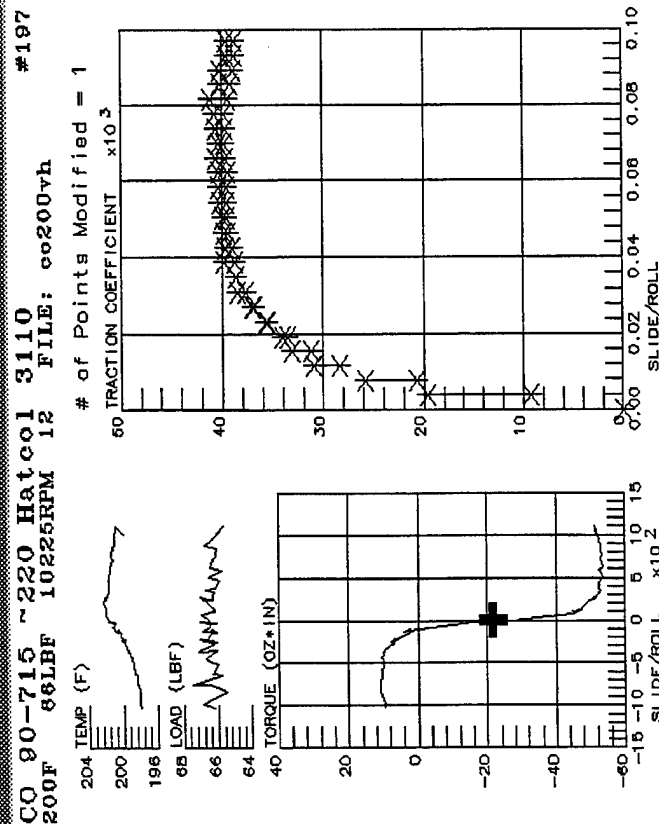


CO 90-715 ~220 Hatcol 3110 #195
200F 20LBF 10225RPM 10 FILE: co200vh

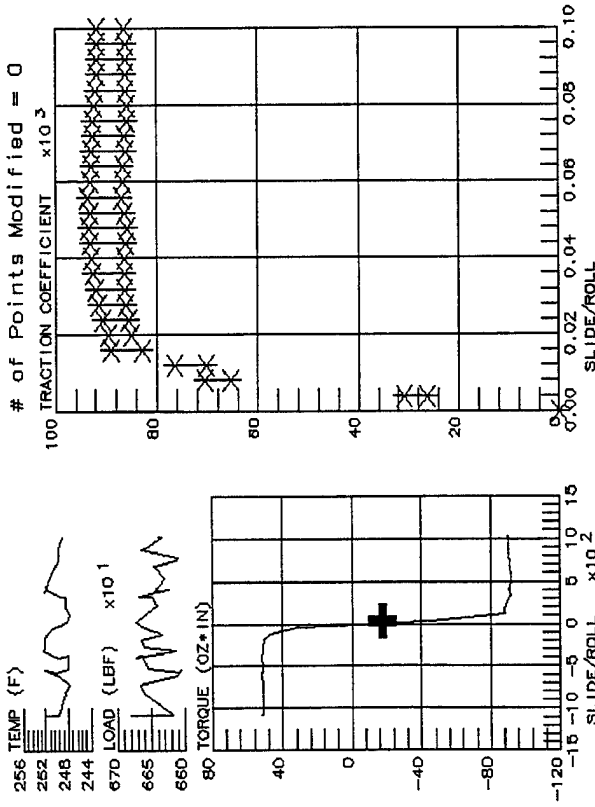


CO 90-715 ~220 Hatcol 3110 #196
200F 38LBF 10225RPM 11 FILE: co200vh

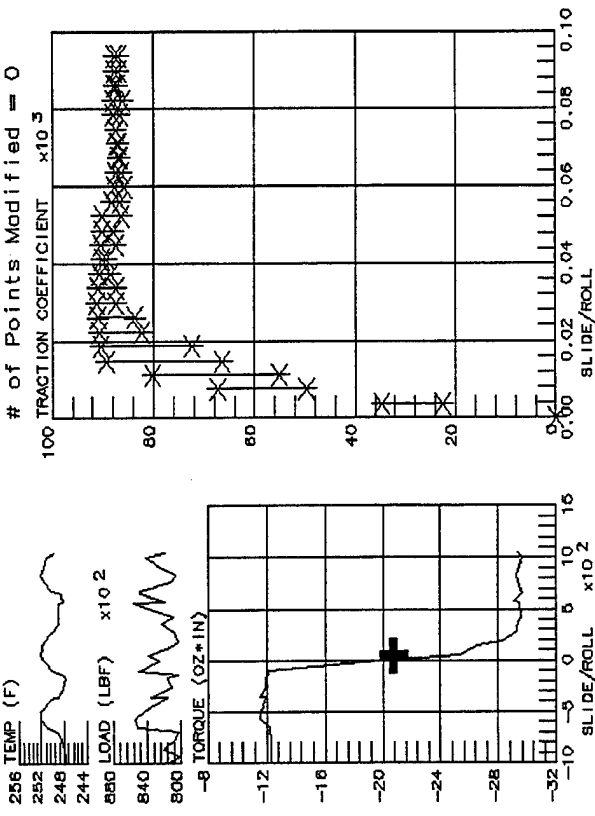




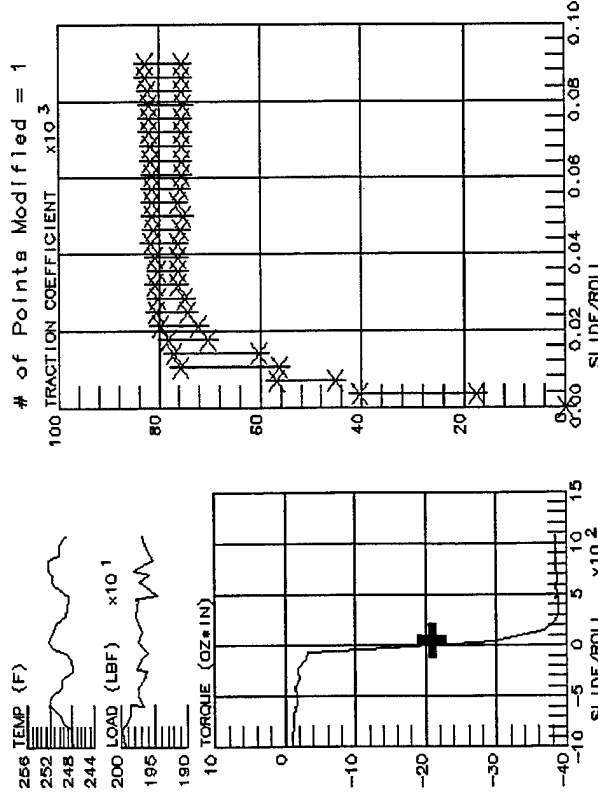
CO 90-715 ~220 Hatcol 3110 #201
250F 66LBF 306RPM 4 FILE: co25-30m



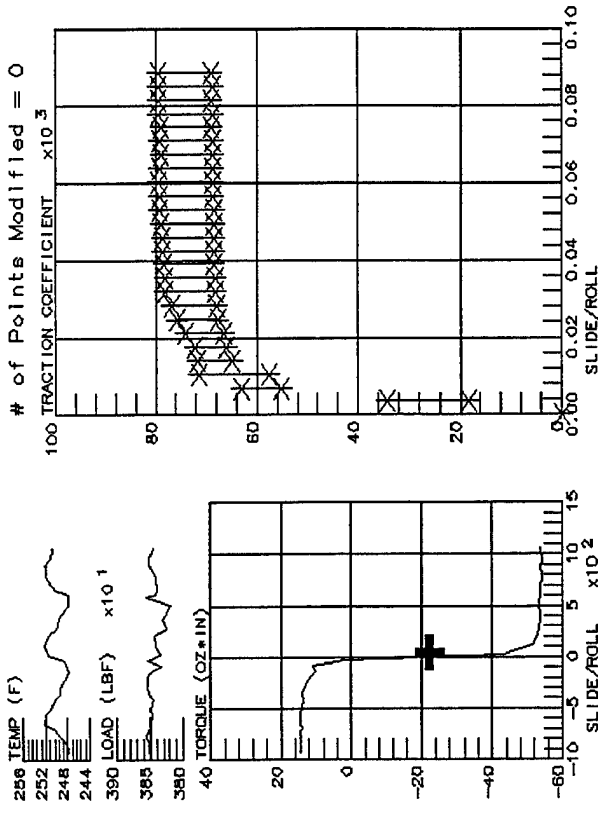
CO 90-715 ~220 Hatcol 3110 #202
250F 8LBF 651RPM 5 FILE: co25-30m



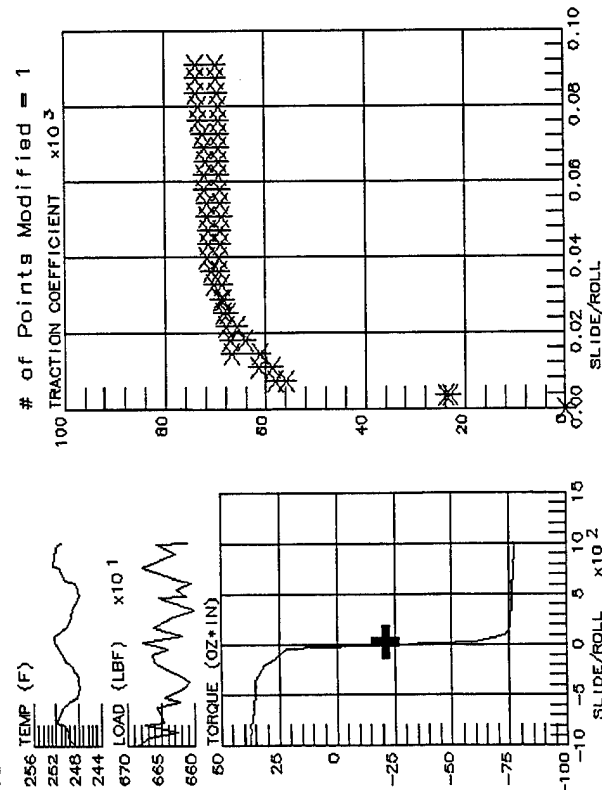
CO 90-715 ~220 Hatcol 3110 #203
250F 20LBF 651RPM 6 FILE: co25-30m



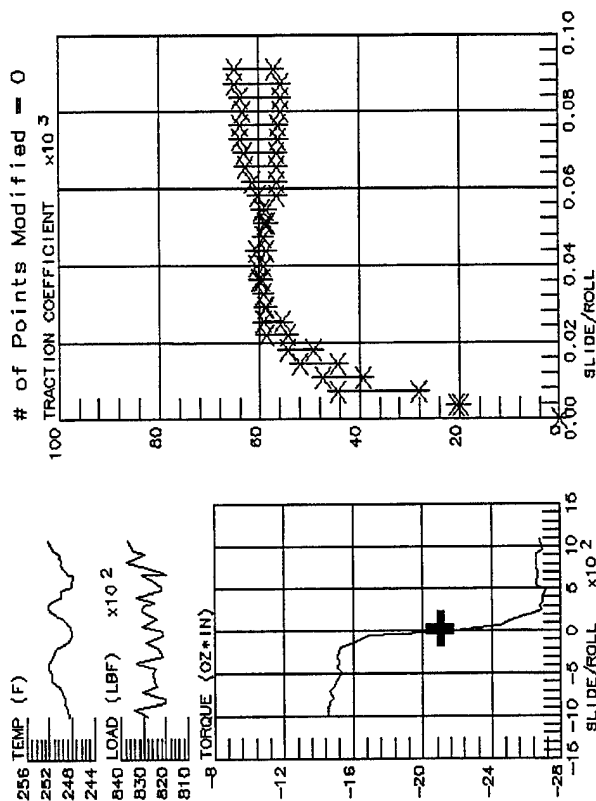
CO 90-715 ~220 Hatcol 3110 #204
250F 38LBF 651RPM 7 FILE: co25-30m



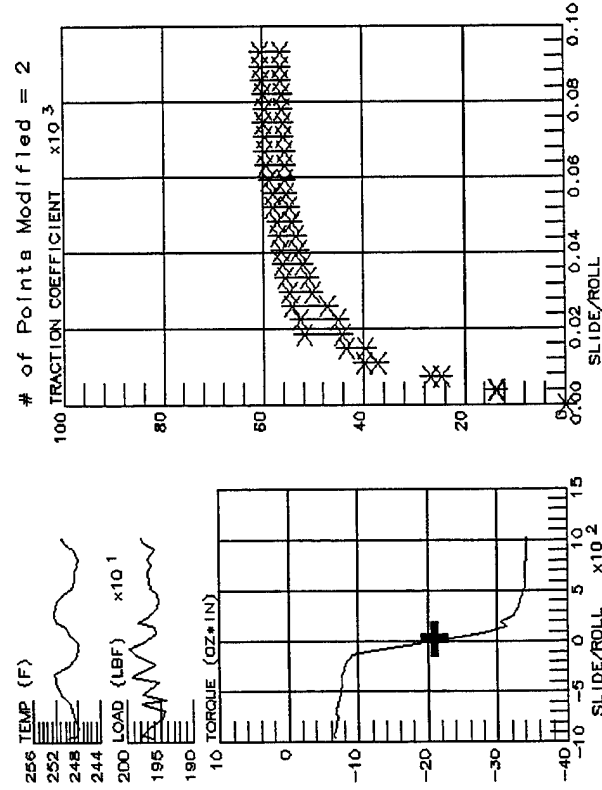
CO 90-715 ~220 Hatcol 3110 #206
250F 66LBF 651RPM 8 FILE: co25-30m



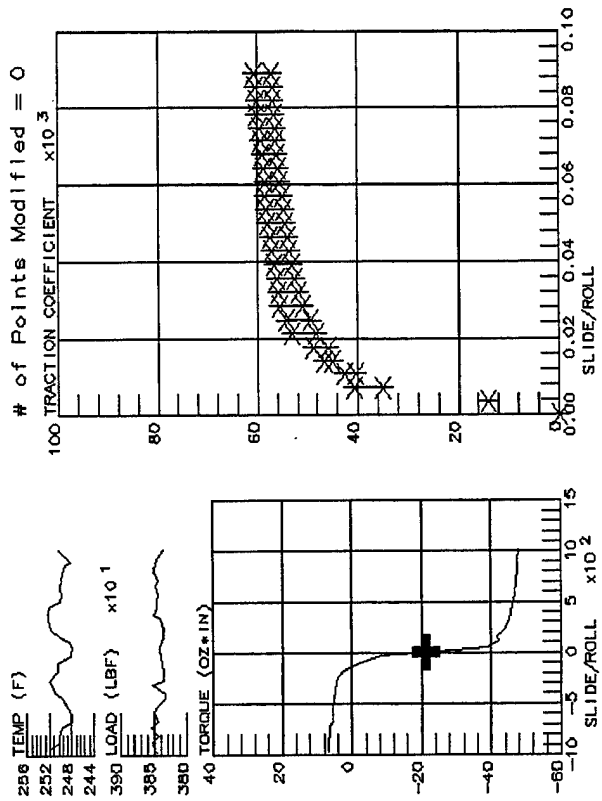
CO 90-715 ~220 Hatcol 3110 #208
250F 8LBF 1264RPM 9 FILE: co25-30m



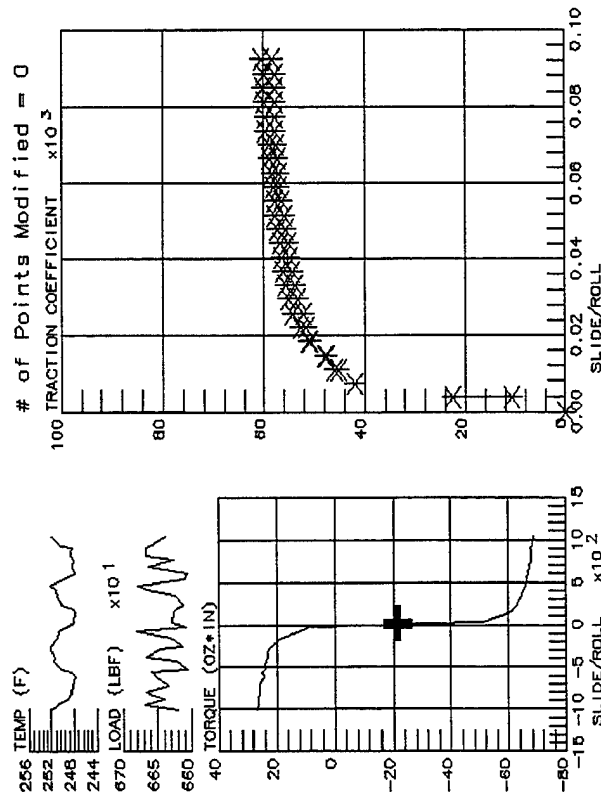
CO 90-715 ~220 Hatcol 3110 #207
250F 20LBF 1264RPM 10 FILE: co25-30m



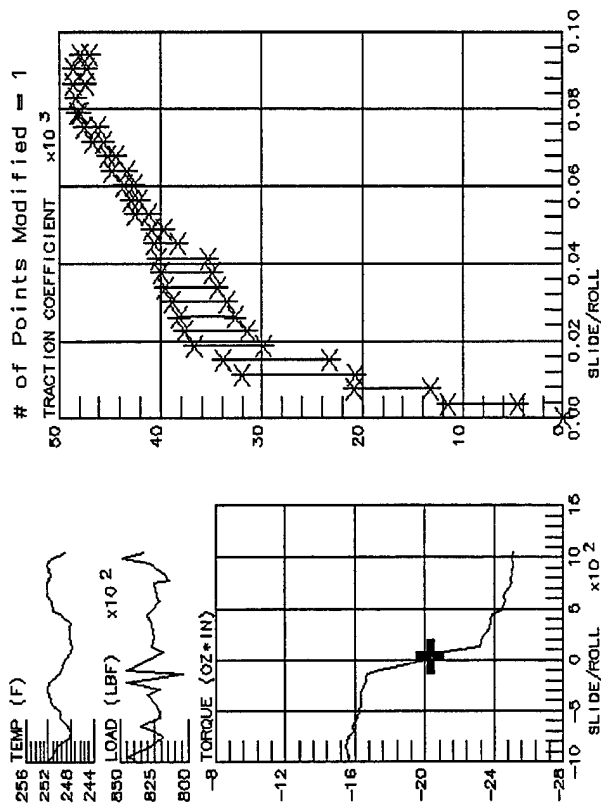
CO 90-715 ~220 Hatcol 3110 #208
250F 38LBF 1264RPM 11 FILE: co25-30m



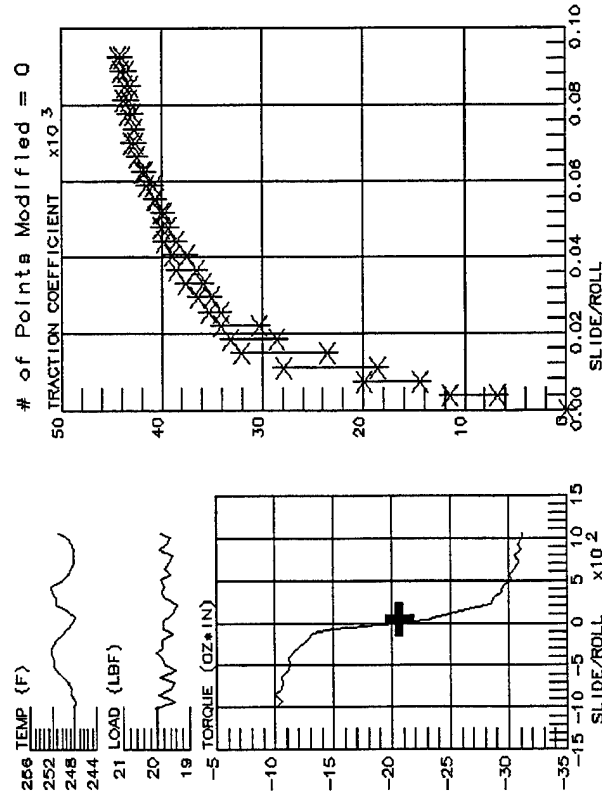
CO 90-715 ~220 Hatcol 3110 #208
250F 66LBF 1264RPM 12 FILE: co25-30m



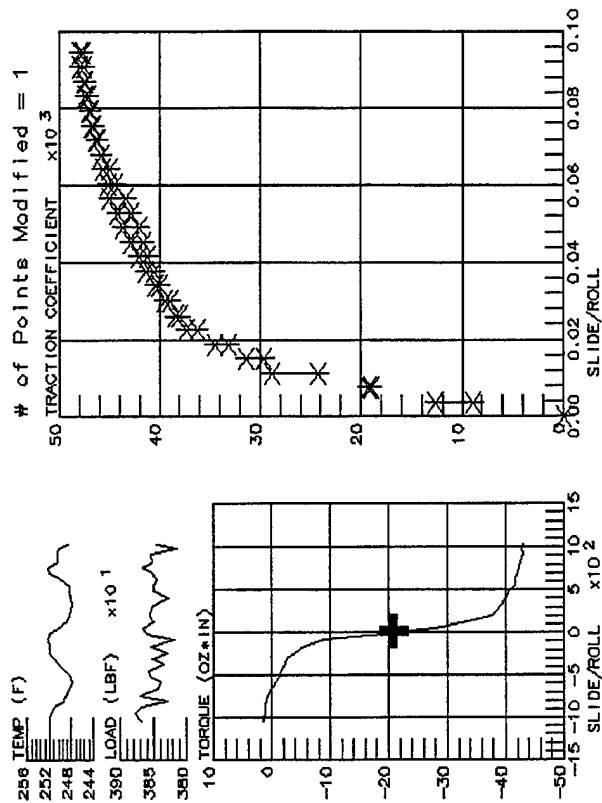
CO 90-715 ~220 Hatcol 3110 #210
250F 8LBF 2568RPM 13 FILE: co25-30m



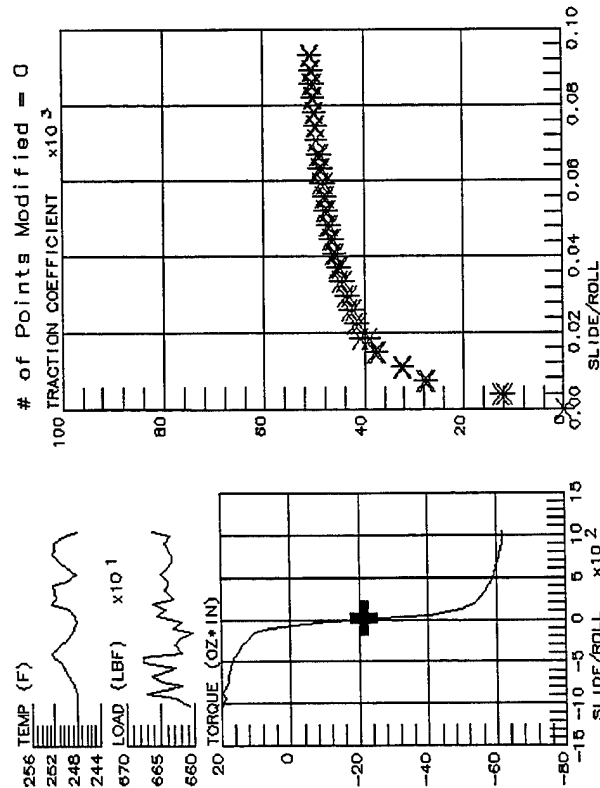
CO 90-715 ~220 Hatcol 3110 #211
250F 20LBF 2568RPM 14 FILE: co25-30m



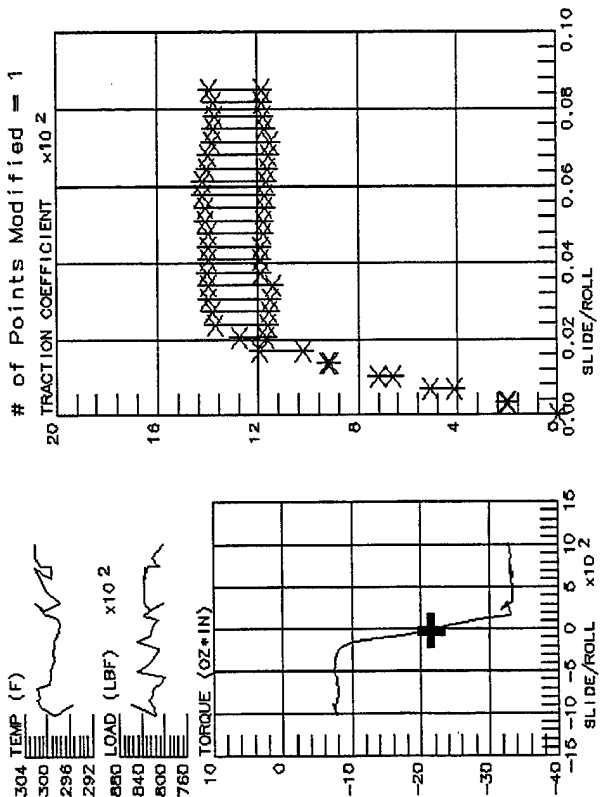
CO 90-715 ~220 Hatcol 3110 #212
250F 38LBF 2568RPM 15 FILE: co25-30m



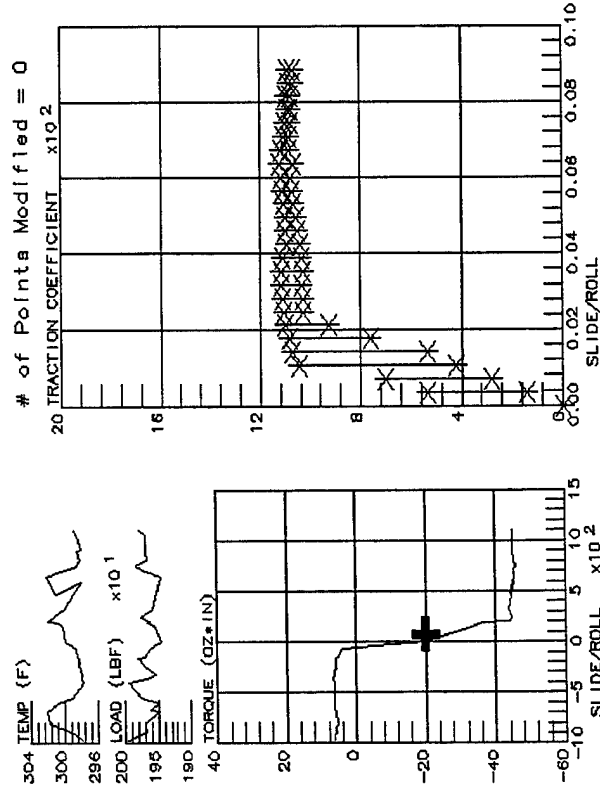
CO 90-715 ~220 Hatcol 3110 #213
250F 86LBF 256RPM 16 FILE: co25-30m



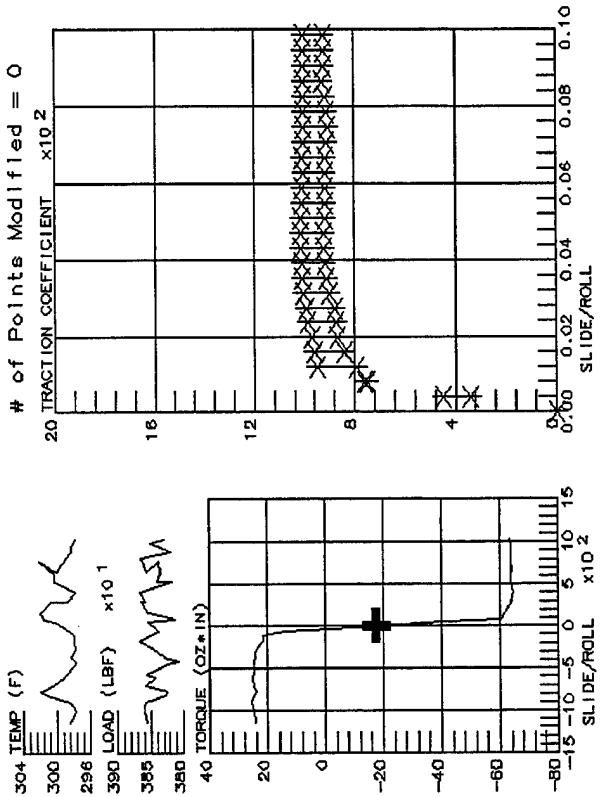
CO 90-715 ~220 Hatcol 3110 #214
300F 86LBF 306RPM 17 FILE: co25-30m



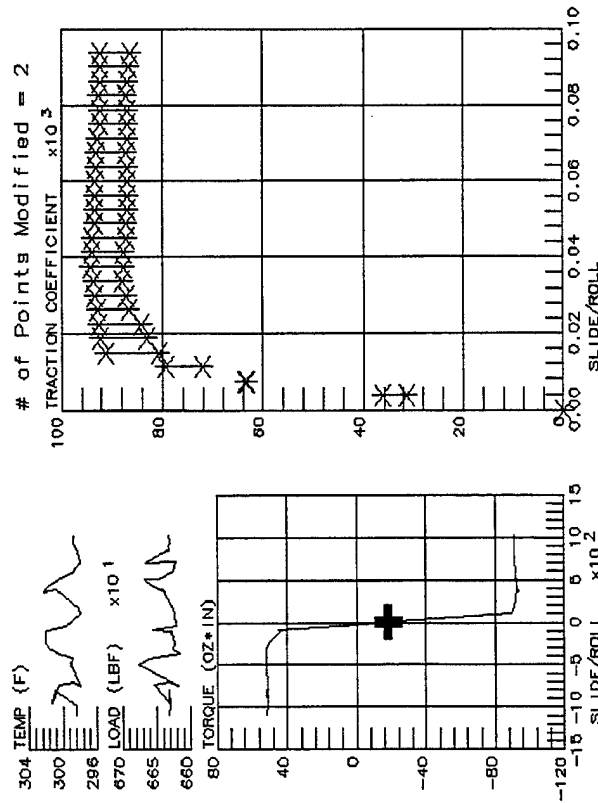
CO 90-715 ~220 Hatcol 3110 #215
300F 20LBF 306RPM 18 FILE: co25-30m



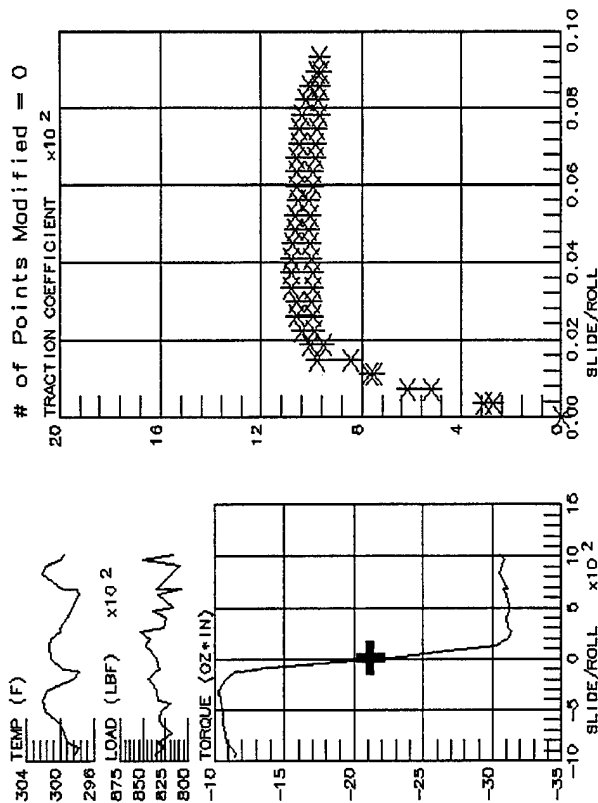
CO 90-715 ~220 Hatcol 3110 #216
300F 38LBF 306RPM 19 FILE: co25-30m



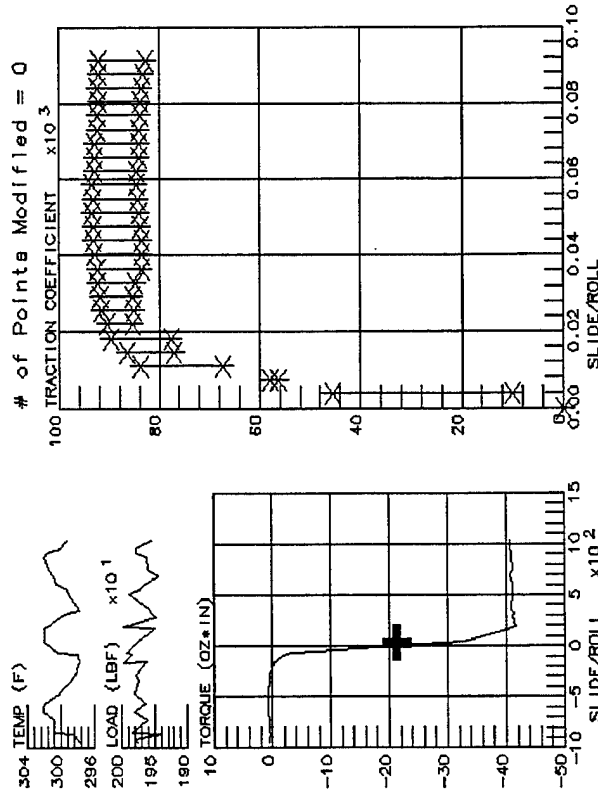
CO 90-715 ~220 Hatcol 3110 #217
300F 66LBF 306RPM 20 FILE: co25-30m



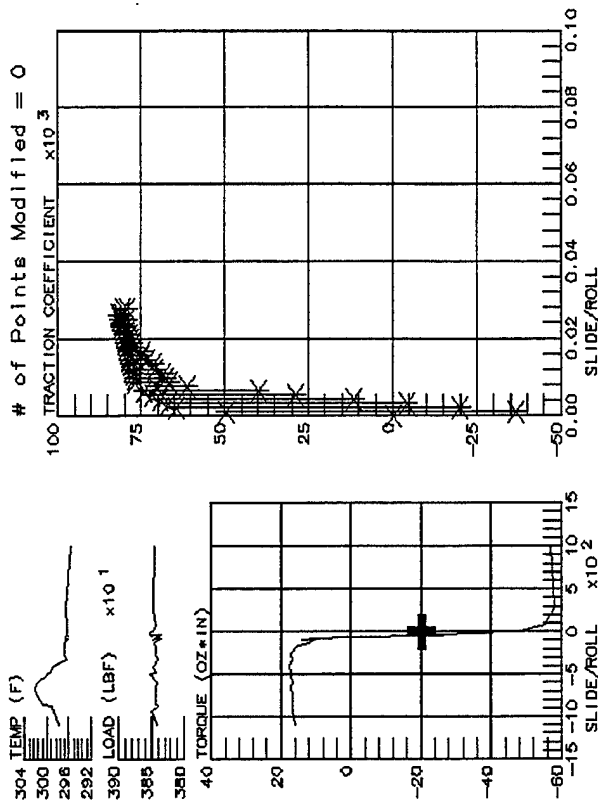
CO 90-715 ~220 Hatcol 3110 #218
300F 8LBF 661RPM 21 FILE: co25-30m



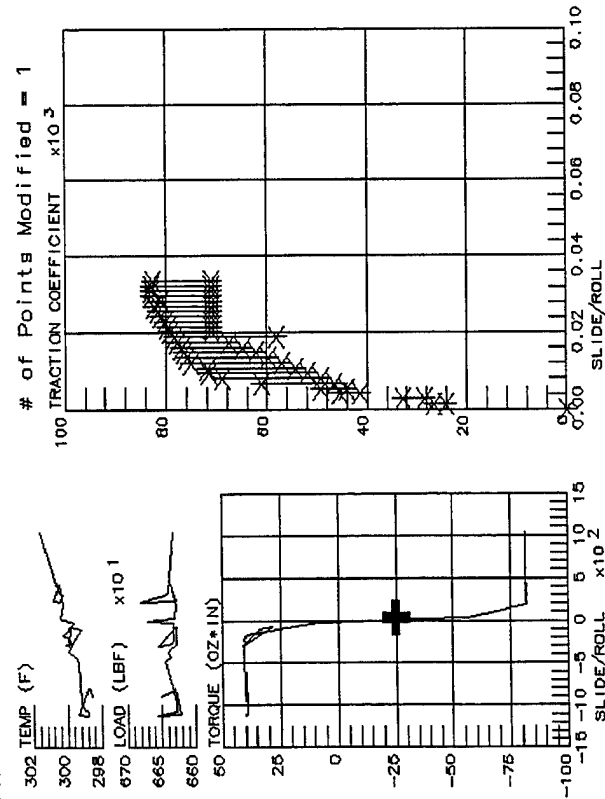
CO 90-715 ~220 Hatcol 3110 #219
300F 20LBF 651RPM 22 FILE: co25-30m



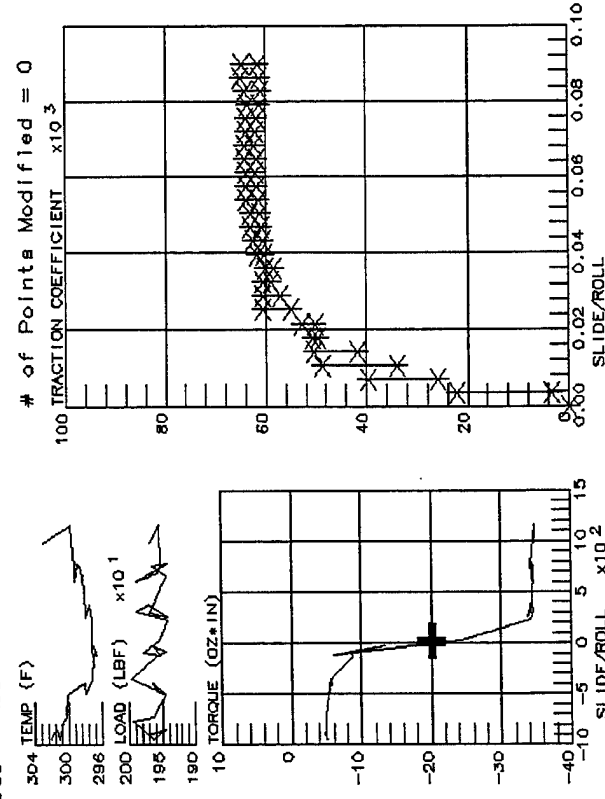
CO 90-715 ~220 Hatcol 3110 #220
300F 38LBF 651RPM 23 FILE: co25-30m



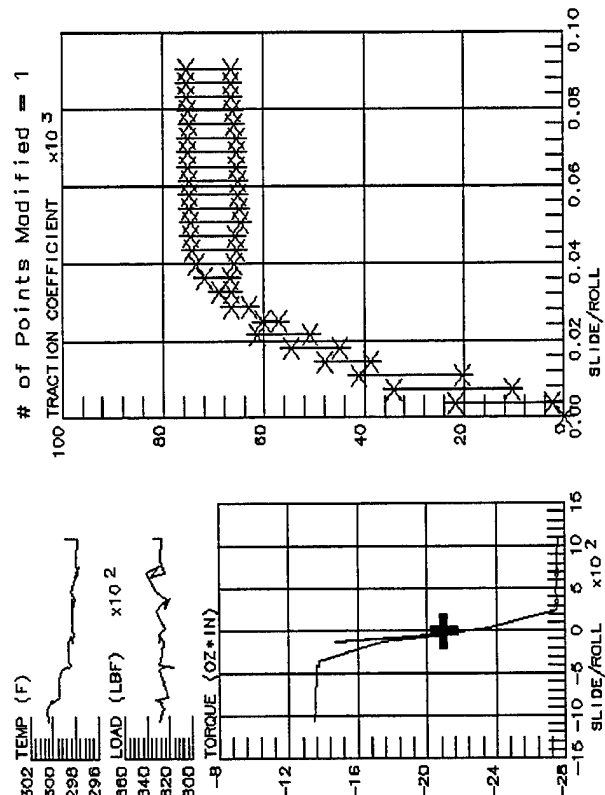
CO 90-715 ~220 Hatcol 3110 #221
300F 66LBF 651RPM 24 FILE: co25-30m



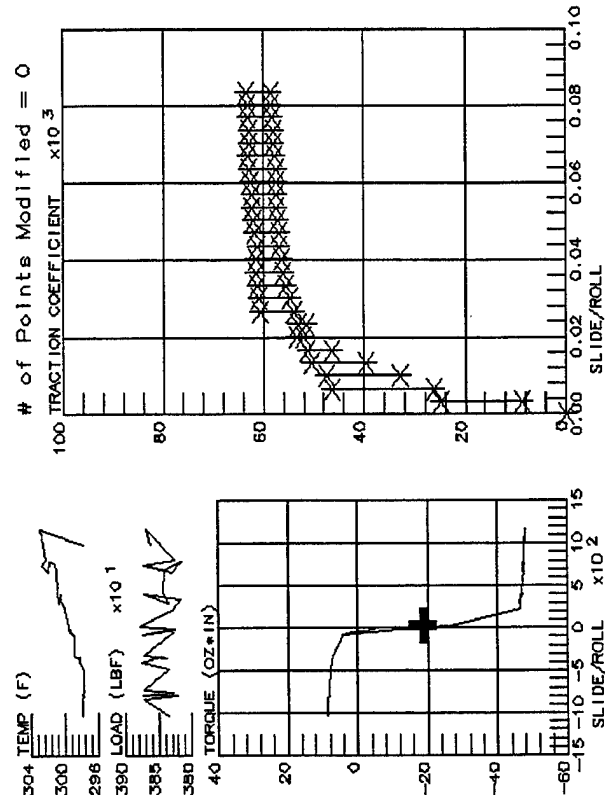
CO 90-715 ~220 Hatcol 3110 #223
300F 20LBF 1264RPM 26 FILE: co25-30m



CO 90-715 ~220 Hatcol 3110 #222
300F 8LBF 1264RPM 25 FILE: co25-30m

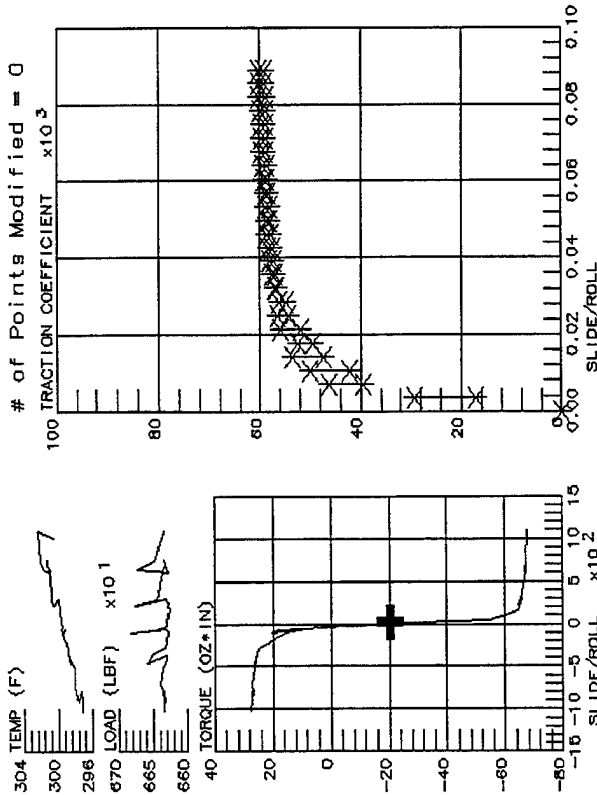


CO 90-715 ~220 Hatcol 3110 #224
300F 98LBF 1264RPM 27 FILE: co25-30m

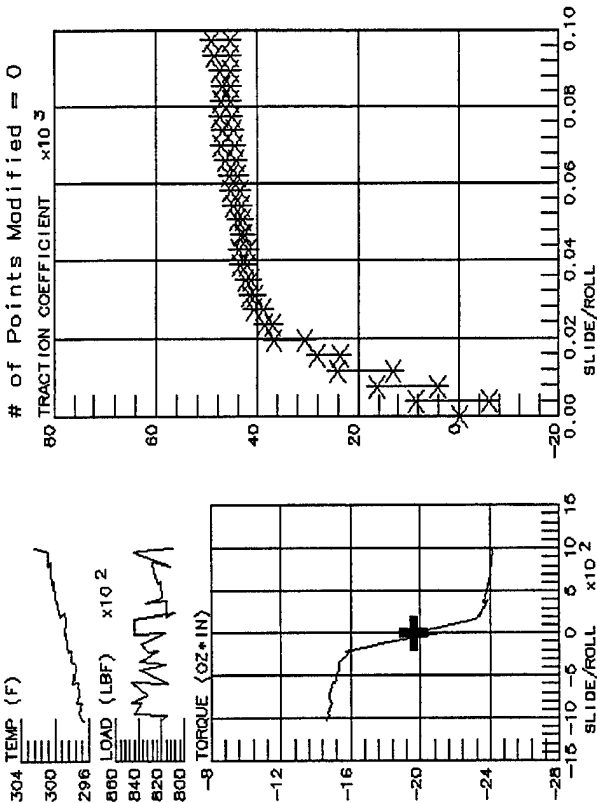


TRACTION AGING

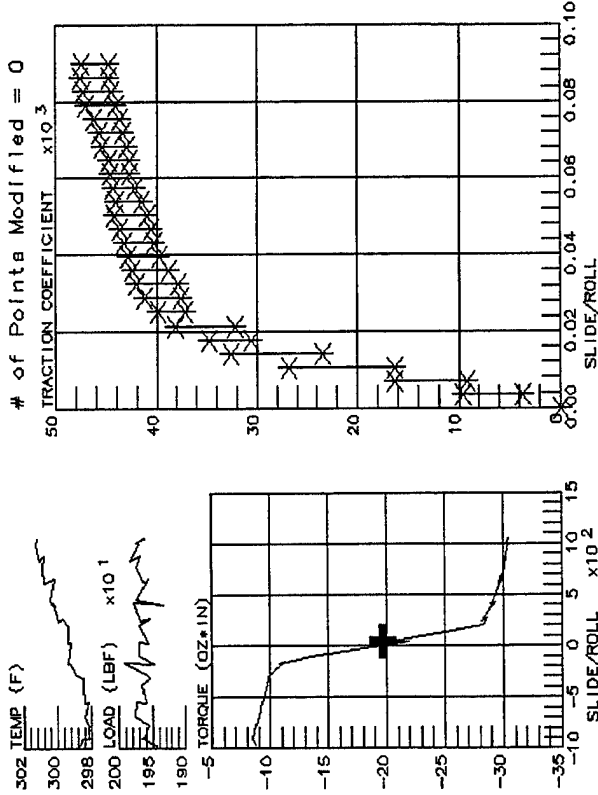
CO 90-715 ~220 Hatcol 3110 #225
300F 66LBF 1264RPM 28 FILE: co25-30m



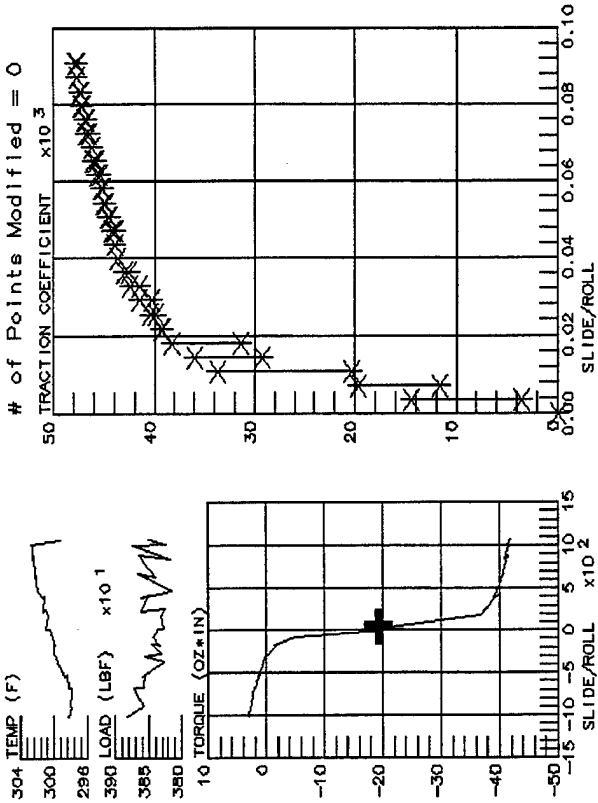
CO 90-715 ~220 Hatcol 3110 #228
300F 8LBF 2568RPM 29 FILE: co25-30m

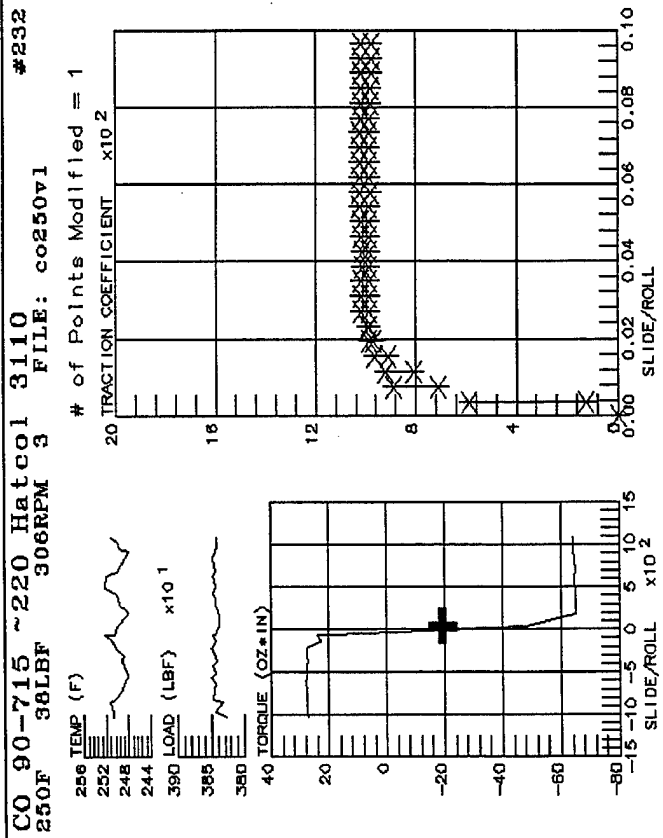
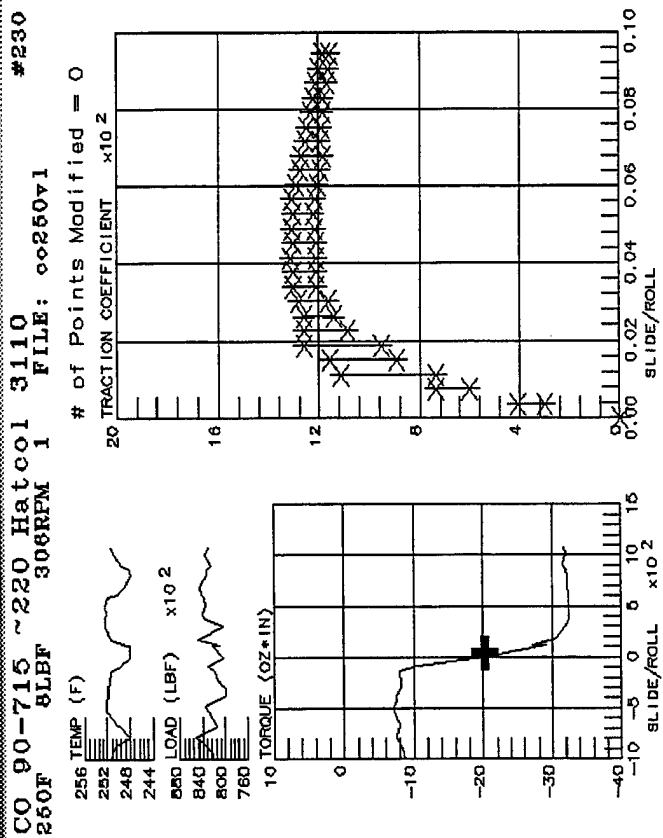
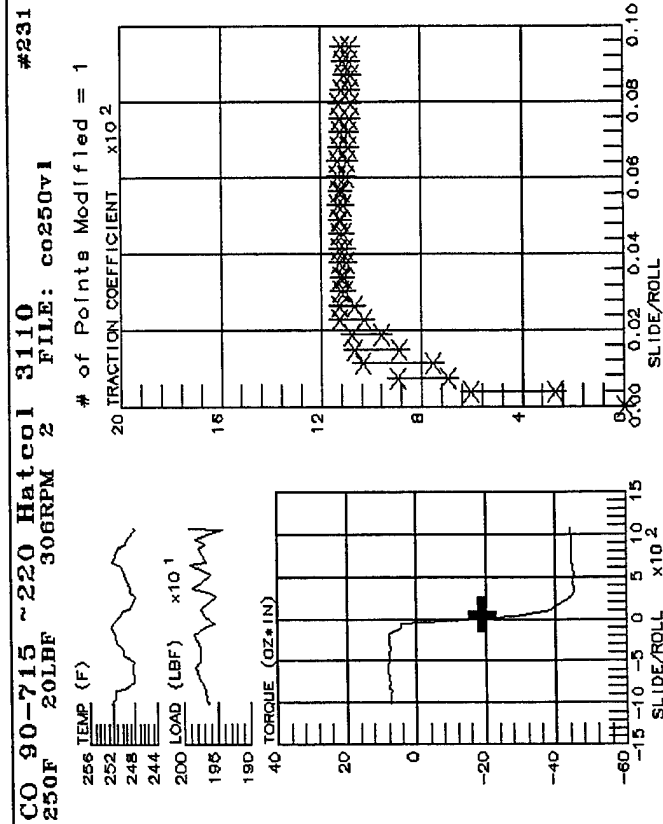
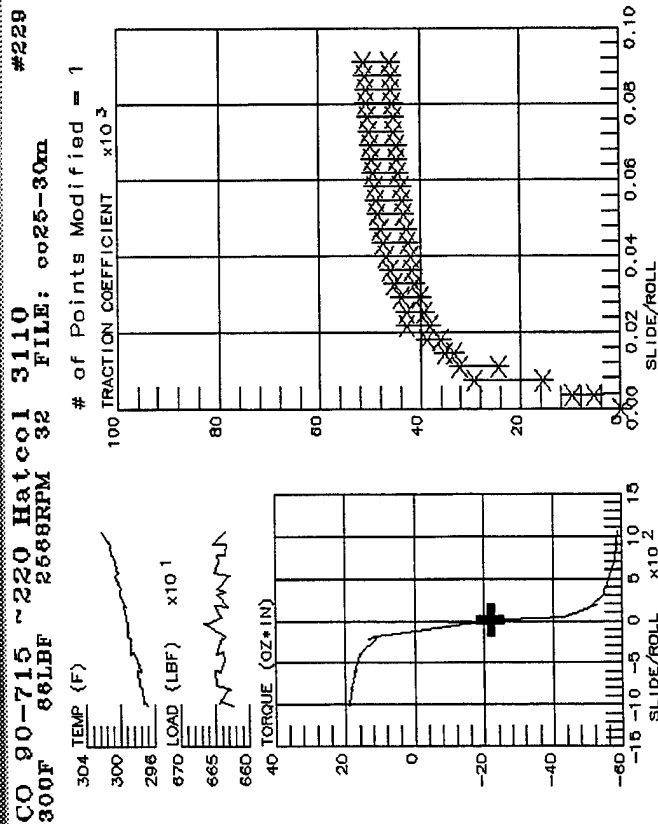


CO 90-715 ~220 Hatcol 3110 #227
300F 20LBF 2568RPM 30 FILE: co25-30m

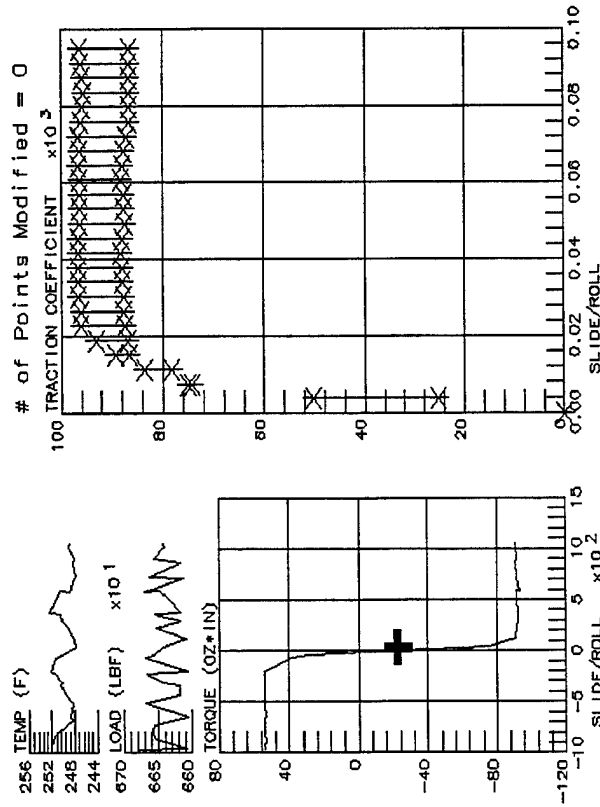


CO 90-715 ~220 Hatcol 3110 #228
300F 38LBF 2568RPM 31 FILE: co25-30m

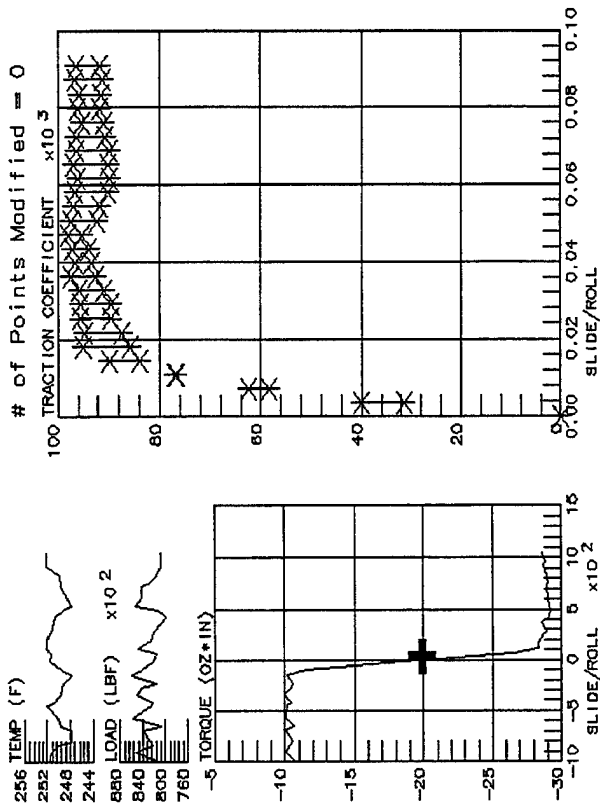




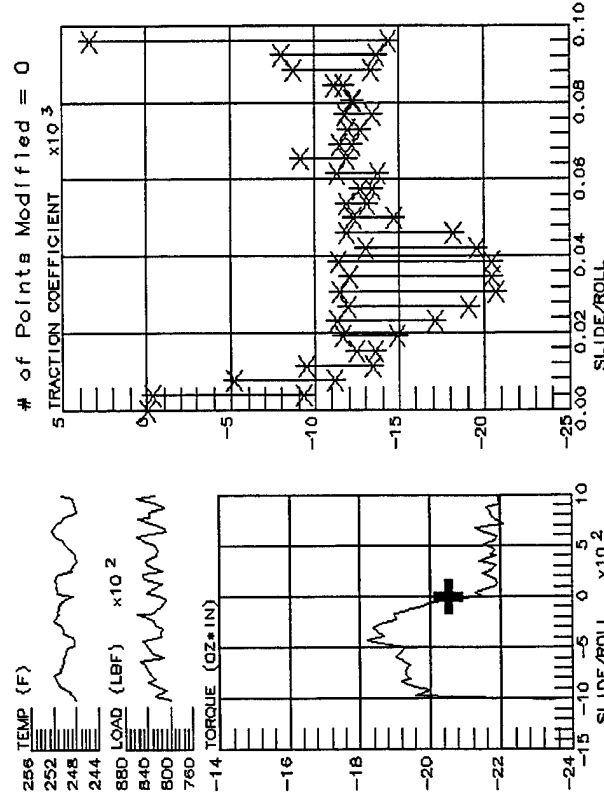
CO 90-715 ~220 Hatcol 3110 #233
250F 66LBF 308RPM 4 FILE: co250v1



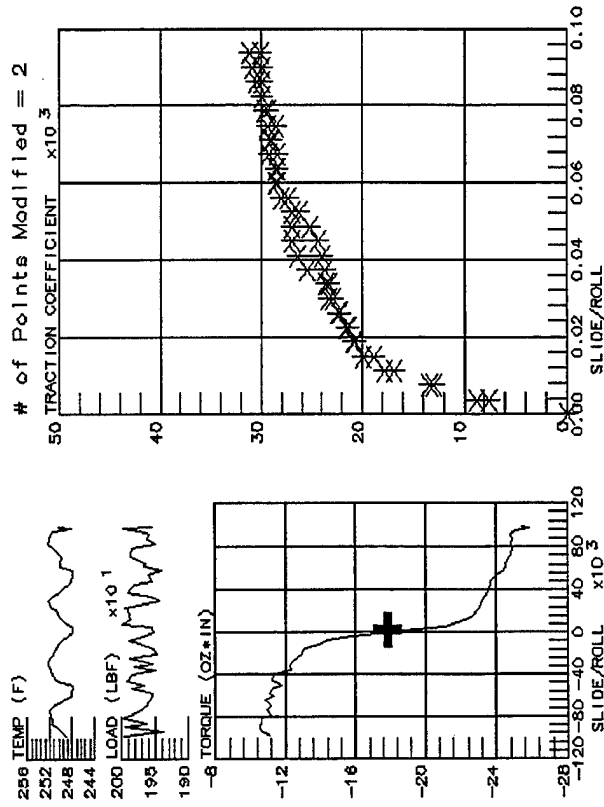
CO 90-715 ~220 Hatcol 3110 #234
250F 8LBF 661RPM 5 FILE: co250v1



CO 90-715 ~220 Hatcol 3110 #235
250F 8LBF 5097RPM 1 FILE: co250vh



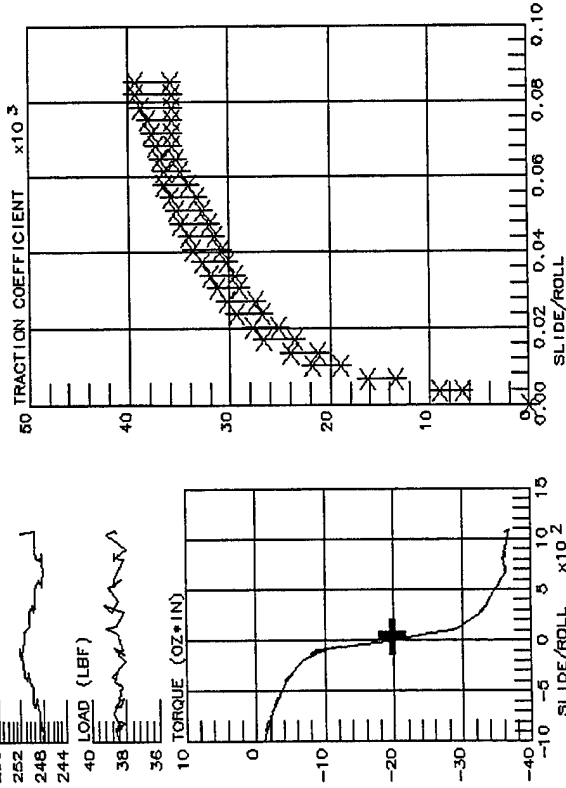
CO 90-715 ~220 Hatcol 3110 #236
250F 20LBF 5097RPM 2 FILE: co250vh



CO 90-715 ~220 Hatcol 3110
250F 38LBF 5097RPM 3 FILE: co250vh

#237

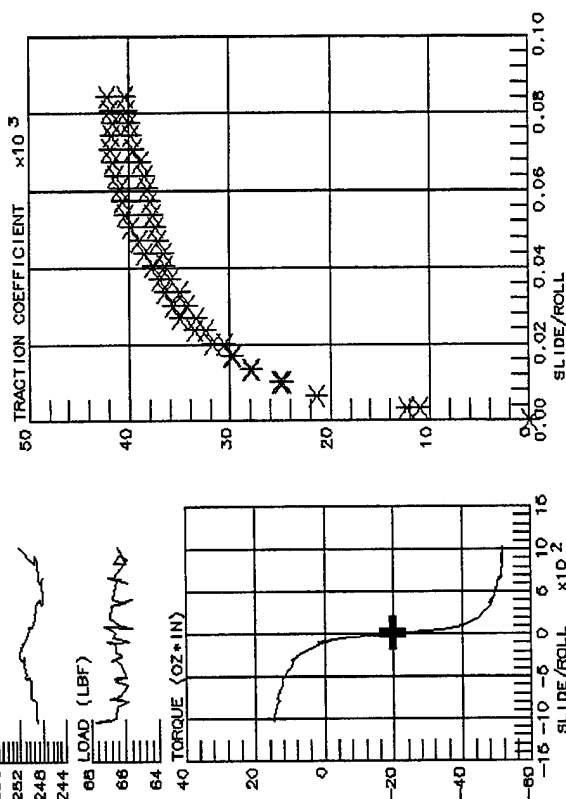
of Points Modified = 0



CO 90-715 ~220 Hatcol 3110
250F 66LBF 5097RPM 4 FILE: co250vh

#238

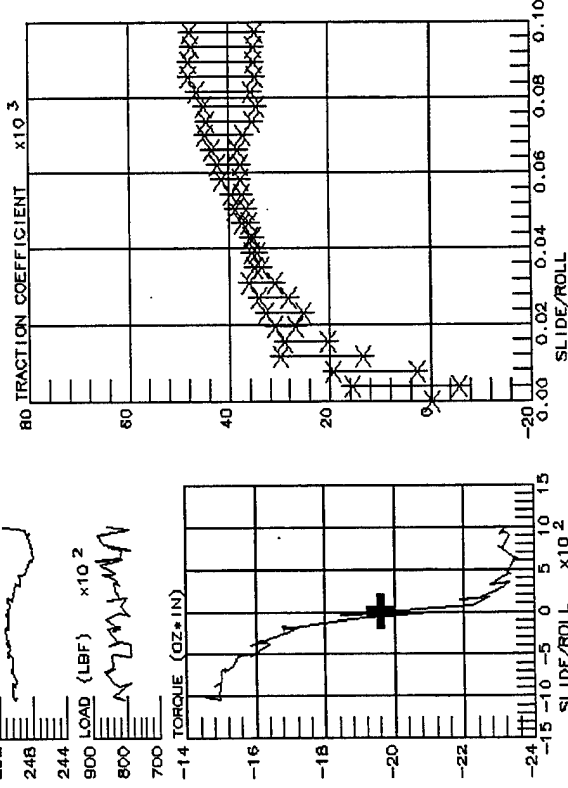
of Points Modified = 2



CO 90-715 ~220 Hatcol 3110
250F 8LBF 7665RPM 5 FILE: co250vh

#239

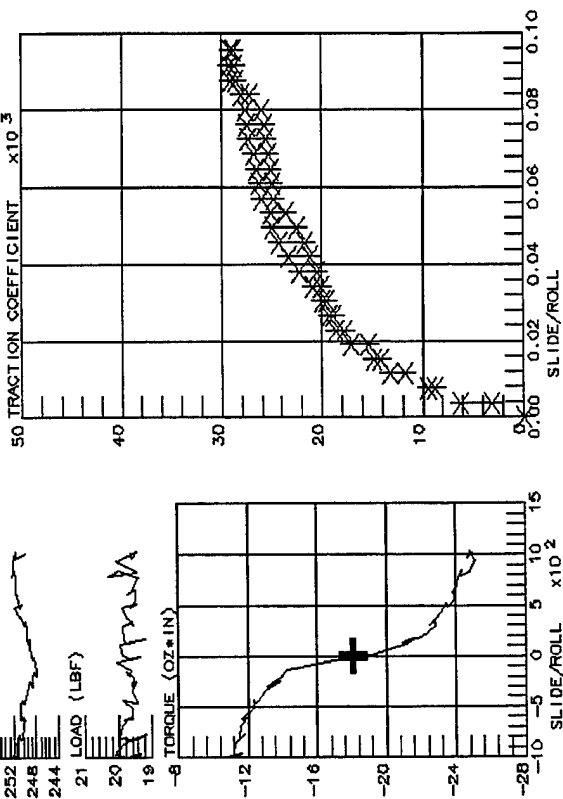
of Points Modified = 0



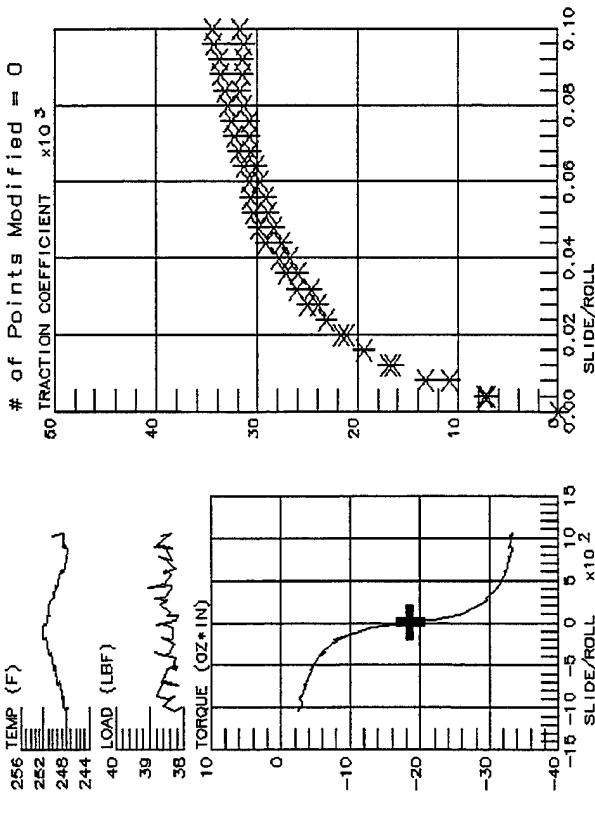
CO 90-715 ~220 Hatcol 3110
250F 20LBF 7665RPM 6 FILE: co250vh

#240

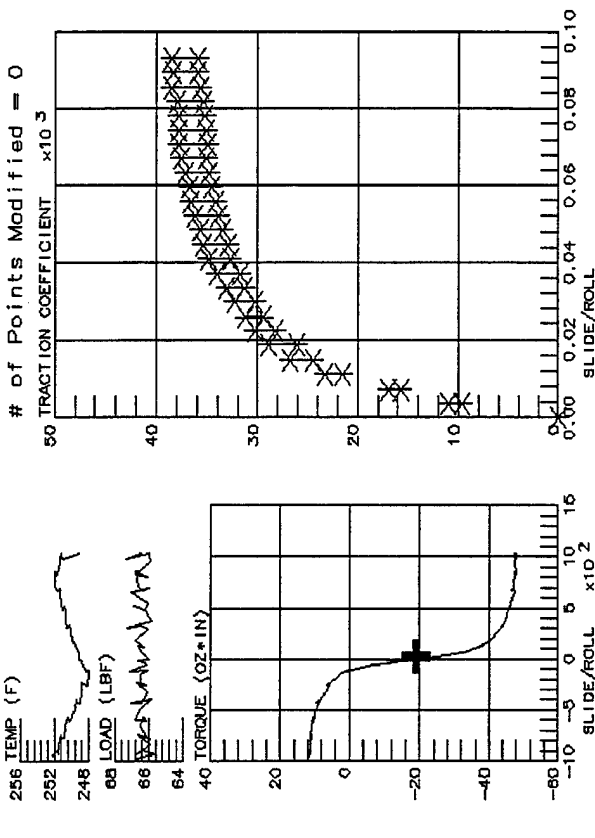
of Points Modified = 0



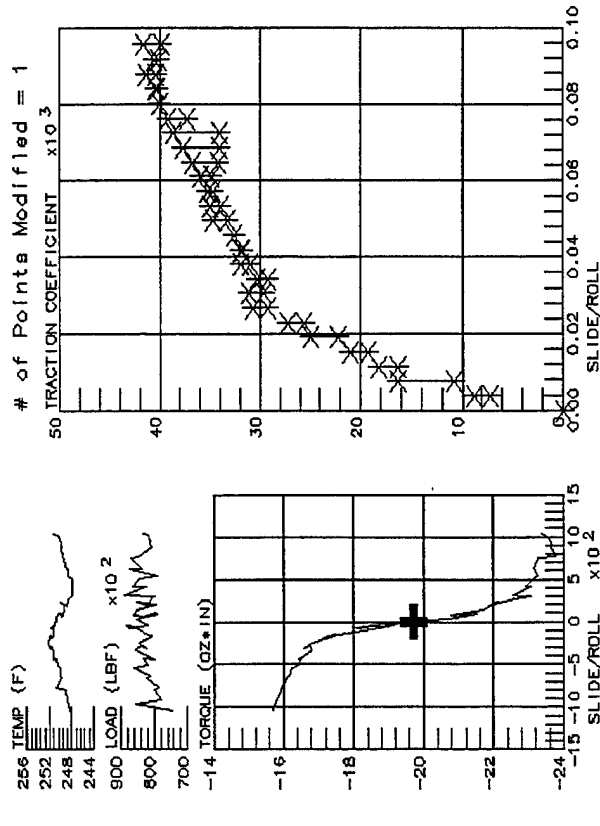
CO 90-715 ~220 Hatcol 3110 #241
250F 38LBF 766SRPM 7 FILE: co250vh



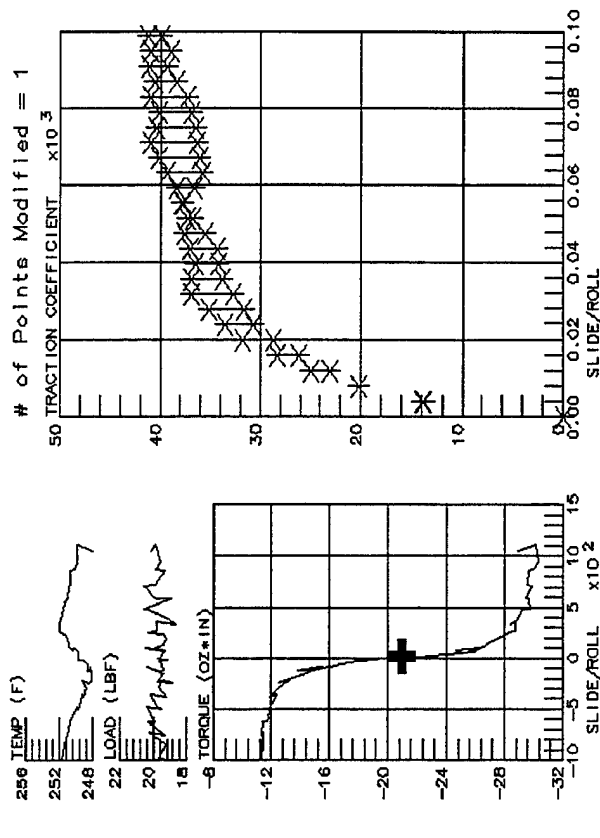
CO 90-715 ~220 Hatcol 3110 #242
250F 66LBF 766SRPM 8 FILE: co250vh



CO 90-715 ~220 Hatcol 3110 #243
250F 8LBF 1022SRPM 9 FILE: co250vh



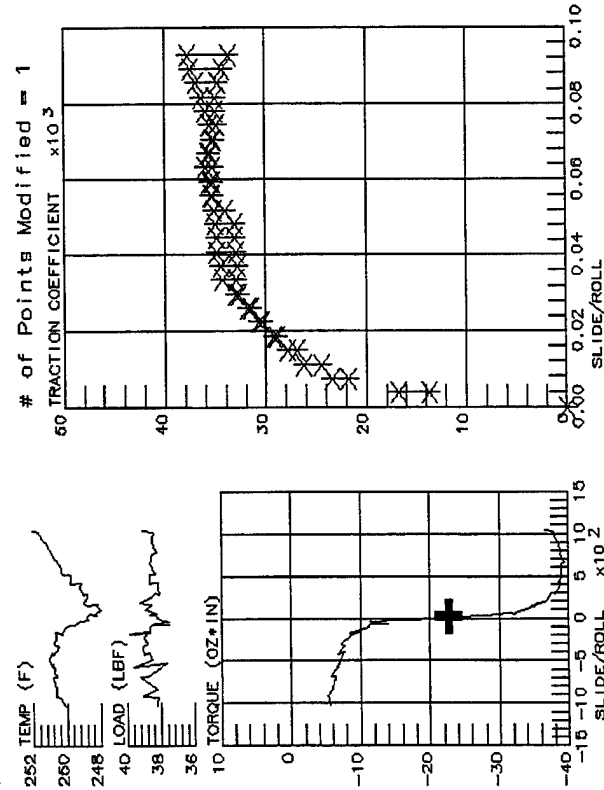
CO 90-715 ~220 Hatcol 3110 #244
250F 20LBF 1022SRPM 10 FILE: co250vh



CO 90-715 ~220 Hatcol 3110
250F 36LBF 10225RPM 11 FILE: co250vh

#245

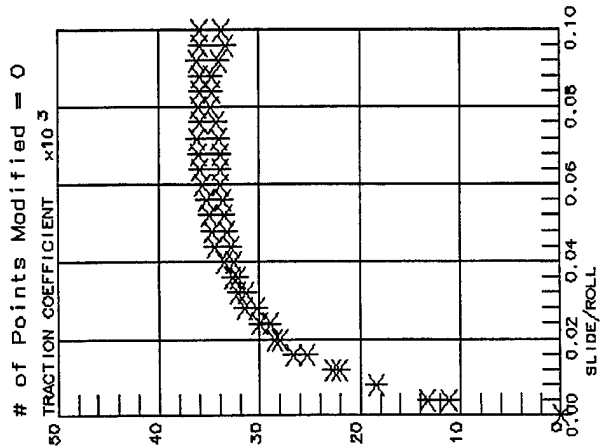
of Points Modified = 1



CO 90-715 ~220 Hatcol 3110
260F 66LBF 10225RPM 12 FILE: co260vh

#246

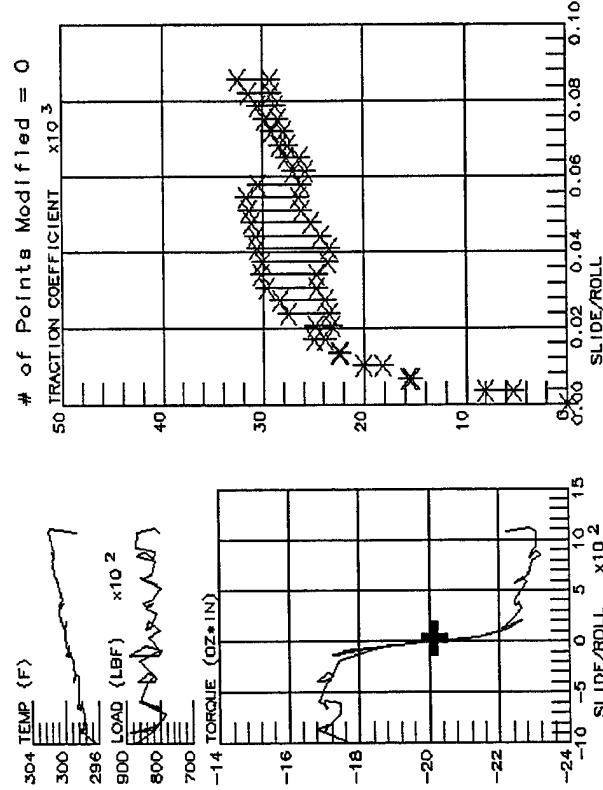
of Points Modified = 0



CO 90-715 ~220 Hatcol 3110
300F 8LBF 5097RPM 1 FILE: co300vh

#247

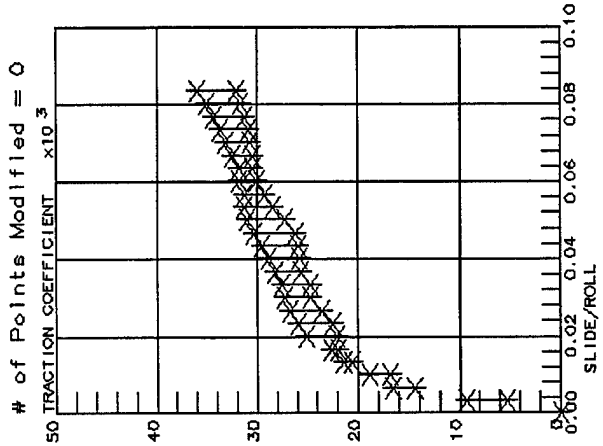
of Points Modified = 0



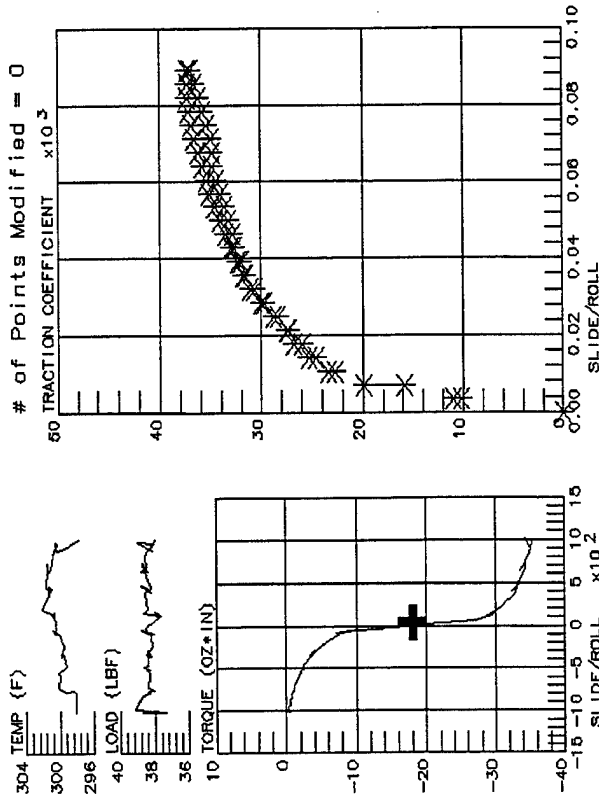
CO 90-715 ~220 Hatcol 3110
300F 20LBF 5097RPM 2 FILE: co300vh

#248

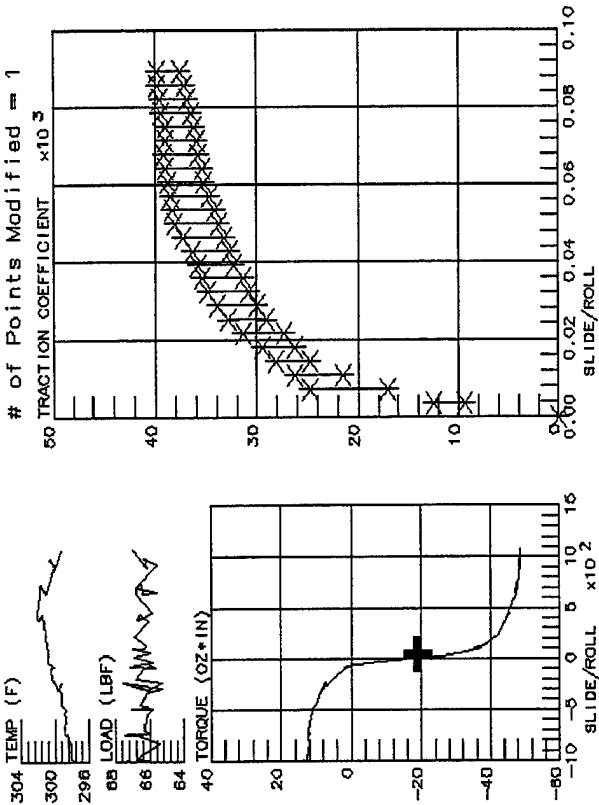
of Points Modified = 0



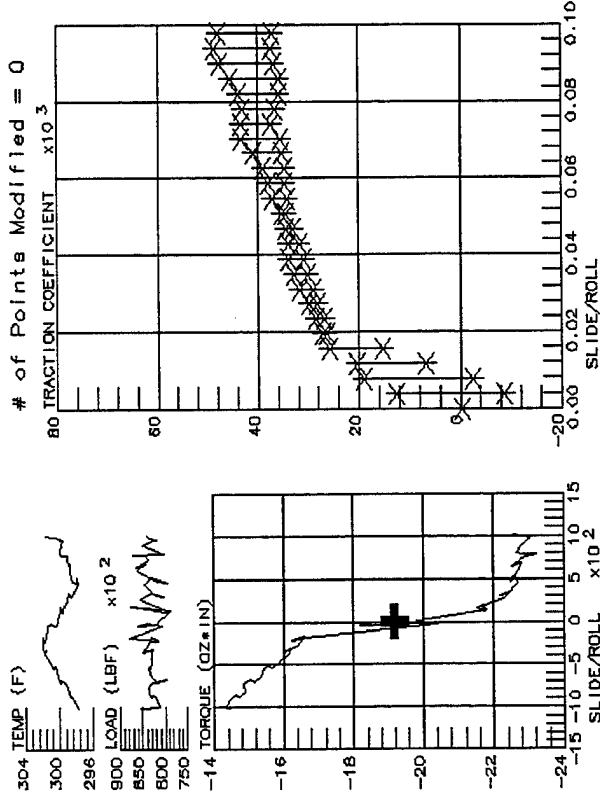
CO 90-715 ~220 Hatcol 3110 #249
300F 38LBF 5097RPM 3 FILE: co300vh



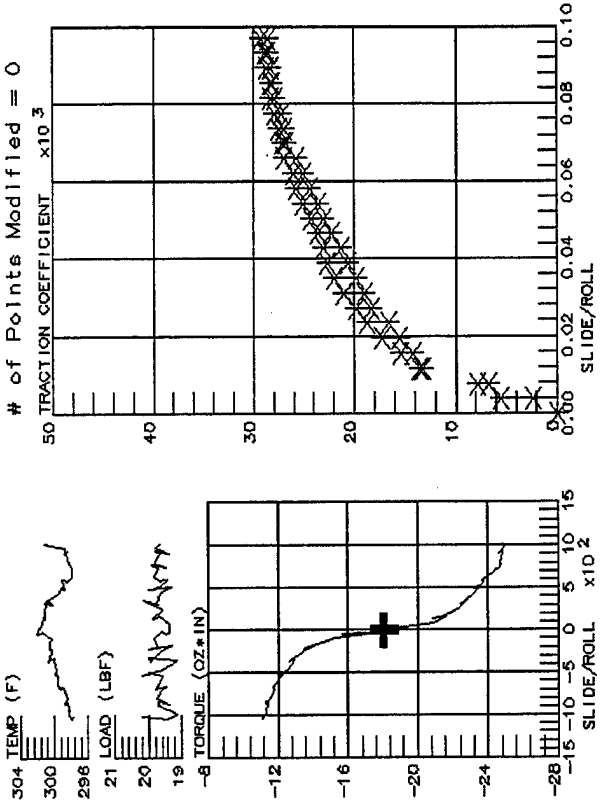
CO 90-715 ~220 Hatcol 3110 #250
300F 66LBF 5097RPM 4 FILE: co300vh



CO 90-715 ~220 Hatcol 3110 #251
300F 8LBF 7665RPM 5 FILE: co300vh

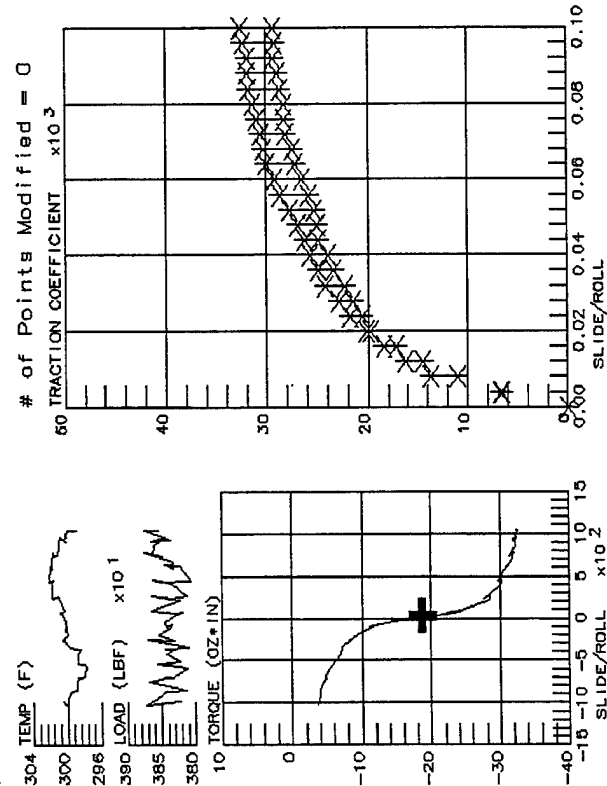


CO 90-715 ~220 Hatcol 3110 #252
300F 20LBF 7665RPM 6 FILE: co300vh



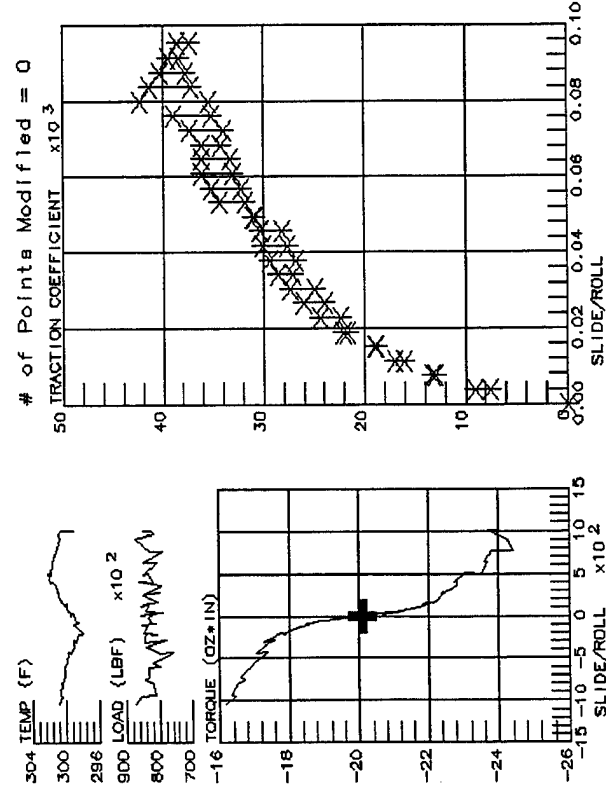
CO 90-715 ~220 Hatcol 3110 #253
300F 38LBF 7665RPM 7 FILE: co300vh

of Points Modified = 0



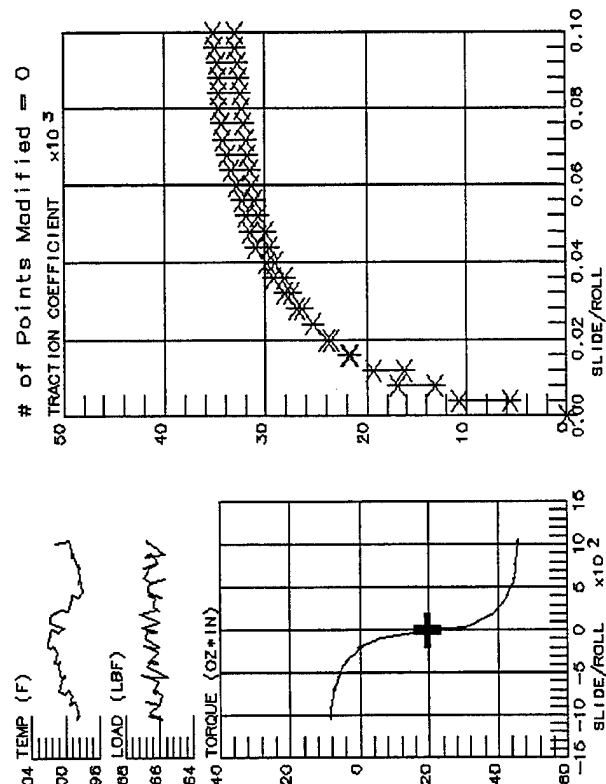
CO 90-715 ~220 Hatcol 3110 #255
300F 8LBF 10225RPM 9 FILE: co300vh

of Points Modified = 0



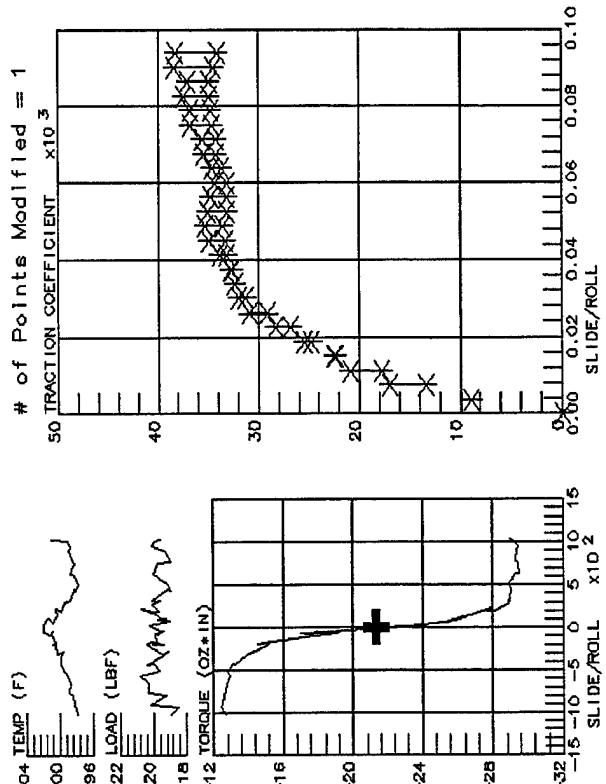
CO 90-715 ~220 Hatcol 3110 #254
300F 66LBF 7665RPM 8 FILE: co300vh

of Points Modified = 0



CO 90-715 ~220 Hatcol 3110 #256
300F 20LBF 10225RPM 10 FILE: co300vh

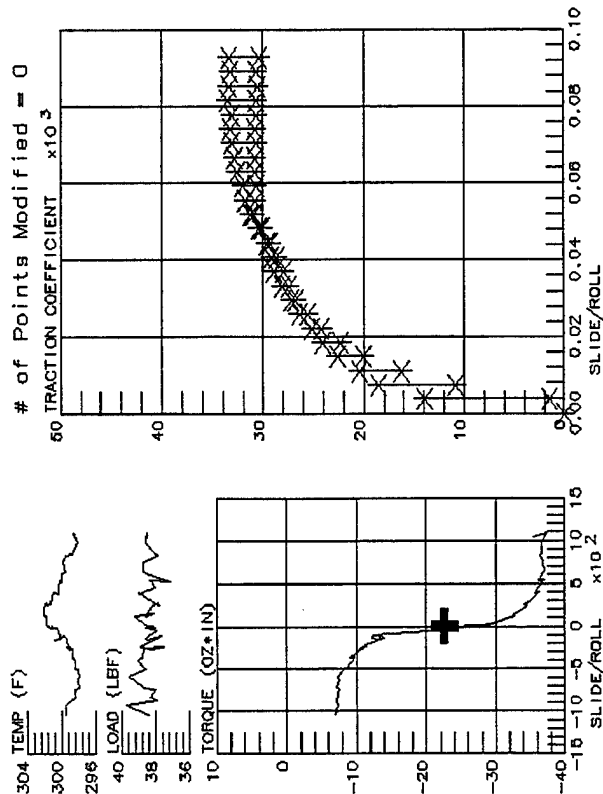
of Points Modified = 1



TRACTION MODULUS

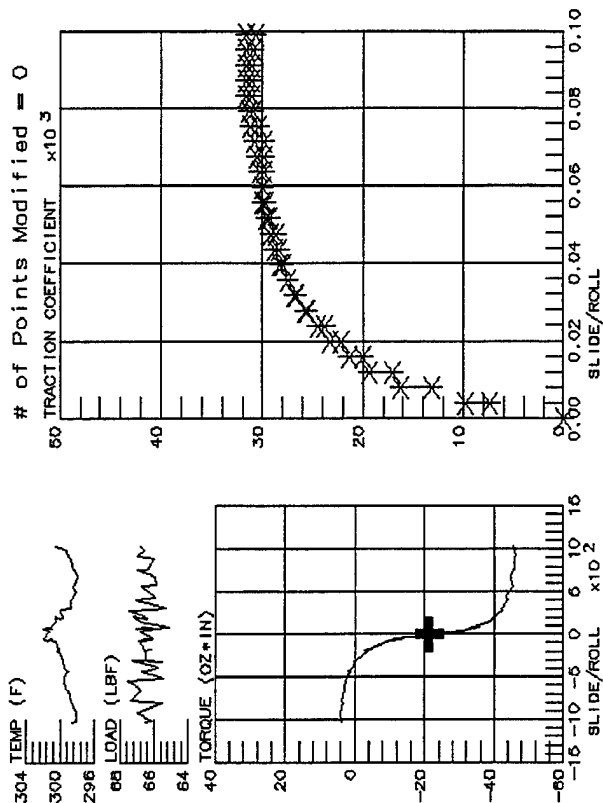
CO 90-715 ~220 Hatool 3110 #257
300F 36LBF 10226RPM 11 FILE: oo300vh

of Points Modified = 0



CO 90-715 ~220 Hatool 3110 #258
300F 66LBF 10226RPM 12 FILE: oo300vh

of Points Modified = 0

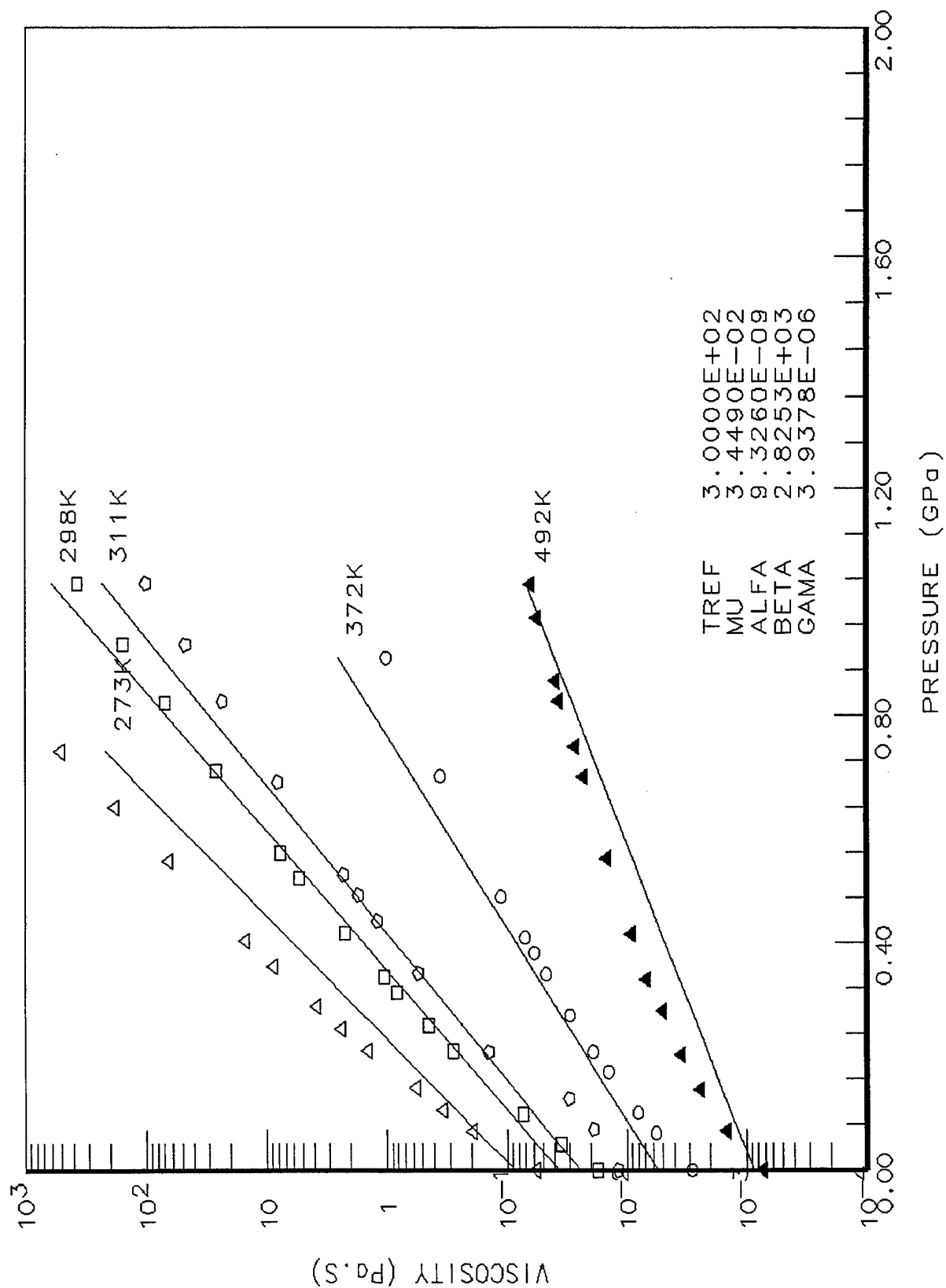


Lubricant name = CO 90-715 Hatcol 3110

NEWTONIAN MODEL TYPE 1

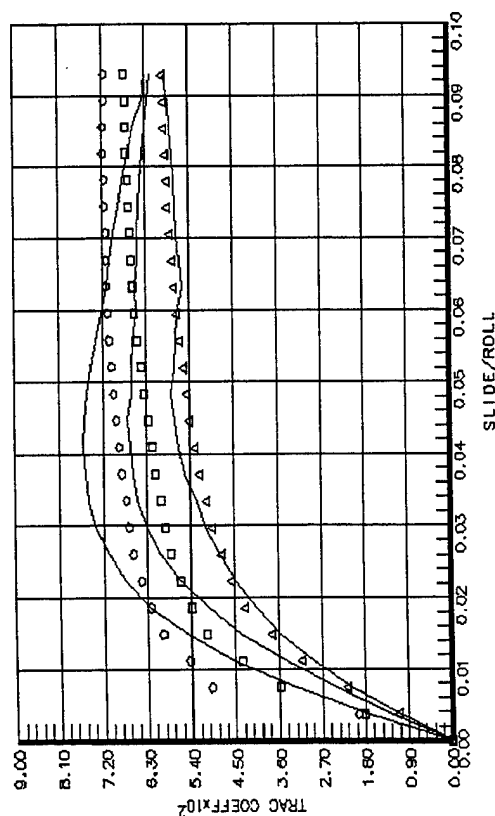
| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| co1.dat | 3.0000E+02 | 2.5132E+00 | 3.0499E+01 | 2.0000E-09 | 3.7136E-01 |
| co2.dat | 3.0000E+02 | 5.1019E+00 | 3.5329E+01 | 2.0000E-09 | 2.6356E-01 |
| co3.dat | 3.0000E+02 | 1.0134E+01 | 1.4174E+01 | 2.0000E-09 | 7.0992E-02 |
| co4.dat | 3.0000E+02 | 1.5240E+01 | 1.4034E+01 | 2.0000E-09 | 5.5788E-02 |
| co5.dat | 3.0000E+02 | 2.0330E+01 | 1.8954E+01 | 2.0000E-09 | 5.0089E-02 |
| co7.dat | 3.1111E+02 | 1.0134E+01 | 1.0747E+01 | 2.0000E-09 | 8.8362E-02 |
| co8.dat | 3.1111E+02 | 1.5240E+01 | 9.8080E+00 | 2.0000E-09 | 5.6376E-02 |
| co9.dat | 3.1111E+02 | 2.0330E+01 | 1.3670E+01 | 2.0000E-09 | 5.2434E-02 |
| co12.dat | 3.3889E+02 | 1.5240E+01 | 4.5498E+00 | 2.0000E-09 | 7.7064E-02 |
| co13.dat | 3.3889E+02 | 2.0330E+01 | 7.8723E+00 | 2.0000E-09 | 7.0225E-02 |
| co15.dat | 3.6667E+02 | 1.0134E+01 | 3.7456E+00 | 2.0000E-09 | 2.1373E-01 |
| co17.dat | 3.6667E+02 | 2.0330E+01 | 3.5092E+00 | 2.0000E-09 | 8.7032E-02 |
| co20.dat | 3.9444E+02 | 1.5240E+01 | 1.1735E+00 | 2.0000E-09 | 1.3496E-01 |
| co24.dat | 4.2222E+02 | 1.5240E+01 | 8.9781E-01 | 2.0000E-09 | 2.2666E-01 |
| co25.dat | 4.2222E+02 | 2.0330E+01 | 1.2060E+00 | 2.0000E-09 | 1.8619E-01 |

90-715 Hatcol 3110 Viscosity Model Type 2



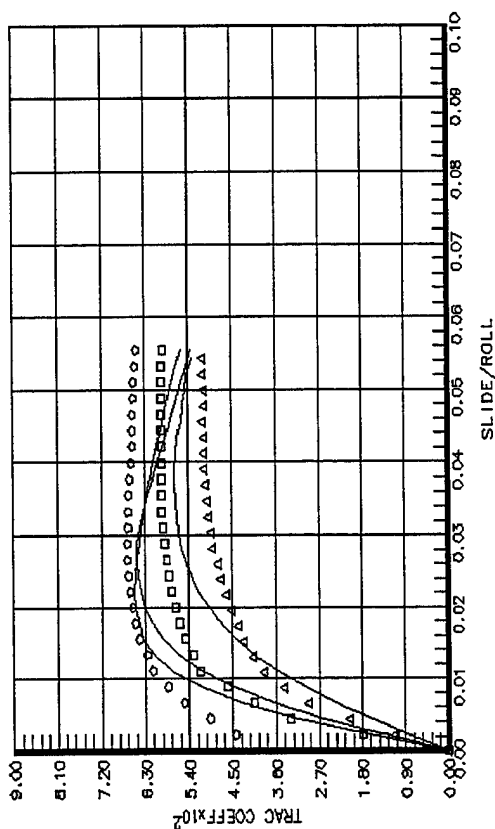
CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1 co1.dat

| | 89N | 169N | 294N | 5.1M/S 300K # 26 | 3.080E+01 | 2.000E-09 | 3.714E-01 | BETA* |
|---|---------|------|------|-------------------|-----------|--|-----------|-------|
| Δ | 132MPA | 169N | 294N | 2.51M/S 300K # 27 | 3.080E+01 | 2.000E-09 <td>3.714E-01</td> <td></td> | 3.714E-01 | |
| □ | 165MPA | | | 2.51M/S 300K # 28 | 3.080E+01 | 2.000E-09 <td>3.714E-01</td> <td></td> | 3.714E-01 | |
| ○ | 1985MPA | | | | | | | |



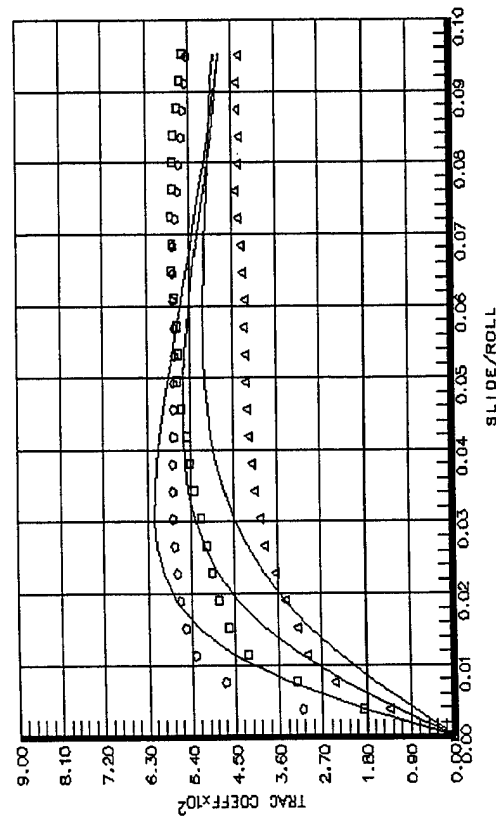
CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1 co2.dat

| | 89N | 169N | 294N | 5.10M/S 300K # 14 | 3.533E+01 | 2.000E-08 | 2.638E-01 | BETA* |
|---|---------|------|------|---|-----------|--|-----------|-------|
| Δ | 132MPA | 169N | 294N | 5.10M/S 300K # 15 <td>3.533E+01</td> <td>2.000E-08 <td>2.638E-01</td> <td></td> </td> | 3.533E+01 | 2.000E-08 <td>2.638E-01</td> <td></td> | 2.638E-01 | |
| □ | 165MPA | | | 5.10M/S 300K # 16 <td>3.533E+01</td> <td>2.000E-08 <td>2.638E-01</td> <td></td> </td> | 3.533E+01 | 2.000E-08 <td>2.638E-01</td> <td></td> | 2.638E-01 | |
| ○ | 1985MPA | | | | | | | |



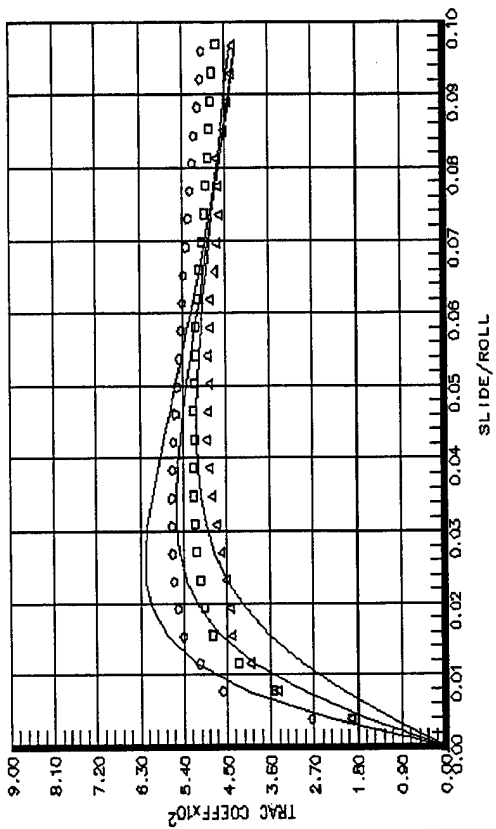
CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1 co3.dat

| | 89N | 169N | 294N | 10.13M/S 300K # 34 | 1.417E+01 | 2.000E-09 | 7.089E-02 | BETA* |
|---|---------|------|------|--|--|---|---------------------|-------|
| Δ | 132MPA | 169N | 294N | 10.13M/S 300K # 35 <td>1.417E+01 <td>2.000E-09 <td>7.089E-02 <td></td> </td></td></td> | 1.417E+01 <td>2.000E-09 <td>7.089E-02 <td></td> </td></td> | 2.000E-09 <td>7.089E-02 <td></td> </td> | 7.089E-02 <td></td> | |
| □ | 165MPA | | | 10.13M/S 300K # 36 <td>1.417E+01 <td>2.000E-09 <td>7.089E-02 <td></td> </td></td></td> | 1.417E+01 <td>2.000E-09 <td>7.089E-02 <td></td> </td></td> | 2.000E-09 <td>7.089E-02 <td></td> </td> | 7.089E-02 <td></td> | |
| ○ | 1985MPA | | | | | | | |



CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1 co4.dat

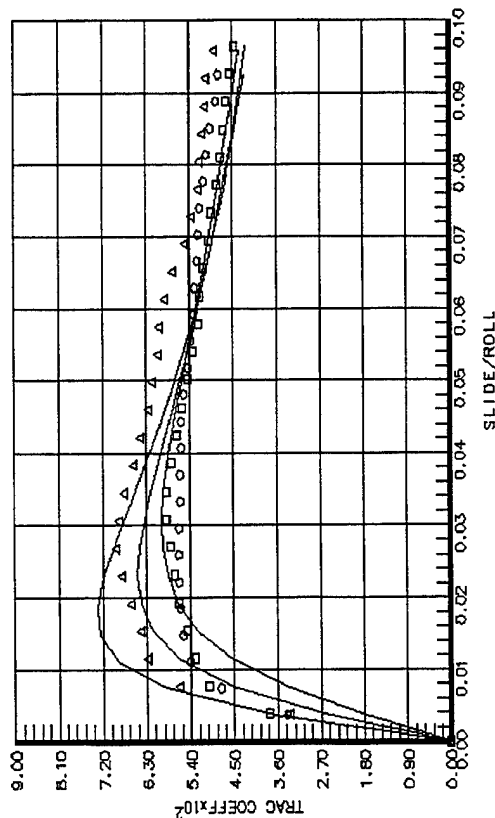
| | 89N | 169N | 294N | 15.24M/S 300K # 38 | 1.403E+01 | 2.000E-09 | 5.579E-02 | BETA* |
|---|---------|------|------|--|--|---|---------------------|-------|
| Δ | 132MPA | 169N | 294N | 15.24M/S 300K # 39 <td>1.403E+01 <td>2.000E-09 <td>5.579E-02 <td></td> </td></td></td> | 1.403E+01 <td>2.000E-09 <td>5.579E-02 <td></td> </td></td> | 2.000E-09 <td>5.579E-02 <td></td> </td> | 5.579E-02 <td></td> | |
| □ | 165MPA | | | 15.24M/S 300K # 40 <td>1.403E+01 <td>2.000E-09 <td>5.579E-02 <td></td> </td></td></td> | 1.403E+01 <td>2.000E-09 <td>5.579E-02 <td></td> </td></td> | 2.000E-09 <td>5.579E-02 <td></td> </td> | 5.579E-02 <td></td> | |
| ○ | 1985MPA | | | | | | | |



CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cos.dat

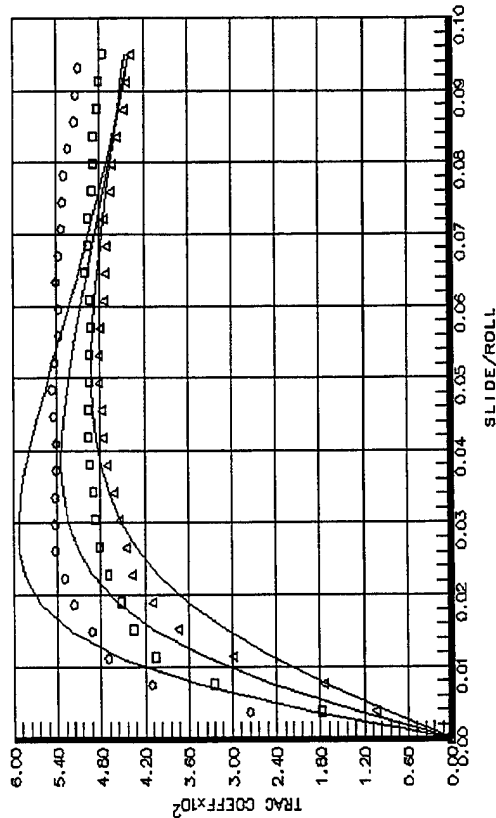
| | 89N | 169N | 294N | 1323MPa | 1654MPa | 1985MPa |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|
| ALFA* | 20.33M/S | 20.33M/S | 20.33M/S | 2.000E+01 | 2.000E+01 | 2.000E+01 |
| BETA* | 300K # 42 | 300K # 43 | 300K # 44 | 5.009E-02 | 5.009E-02 | 5.009E-02 |



CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cos.dat

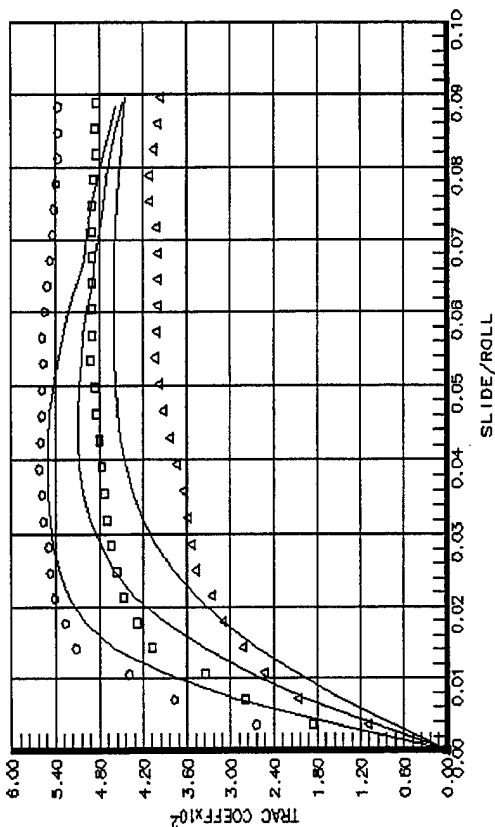
| | 89N | 169N | 294N | 1323MPa | 1654MPa | 1985MPa |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|
| ALFA* | 15.24M/S | 15.24M/S | 15.24M/S | 9.808E+00 | 9.808E+00 | 9.808E+00 |
| BETA* | 311K # 85 | 311K # 86 | 311K # 87 | 5.638E-02 | 5.638E-02 | 5.638E-02 |



CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cos.dat

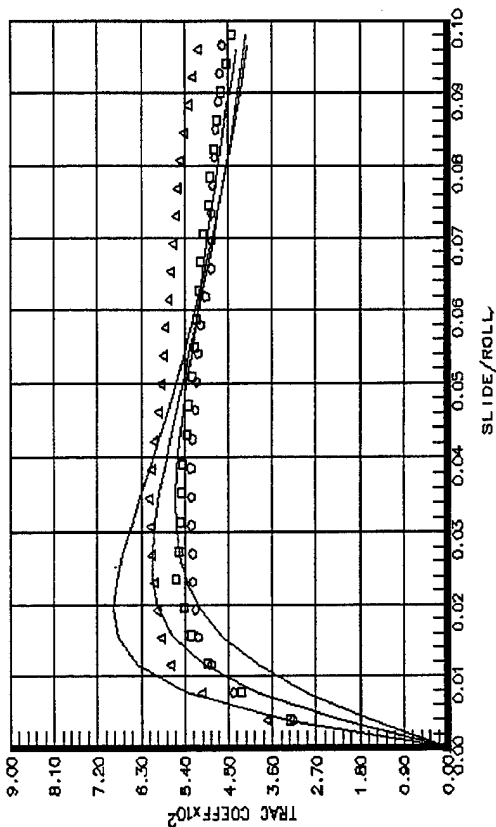
| | 89N | 169N | 294N | 1323MPa | 1654MPa | 1985MPa |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|
| ALFA* | 10.13M/S | 10.13M/S | 10.13M/S | 2.000E+01 | 2.000E+01 | 2.000E+01 |
| BETA* | 311K # 81 | 311K # 82 | 311K # 83 | 8.838E-02 | 8.838E-02 | 8.838E-02 |



CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cos.dat

| | 89N | 169N | 294N | 1323MPa | 1654MPa | 1985MPa |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|
| ALFA* | 20.33M/S | 20.33M/S | 20.33M/S | 2.000E+01 | 2.000E+01 | 2.000E+01 |
| BETA* | 311K # 88 | 311K # 89 | 311K # 91 | 5.243E-02 | 5.243E-02 | 5.243E-02 |



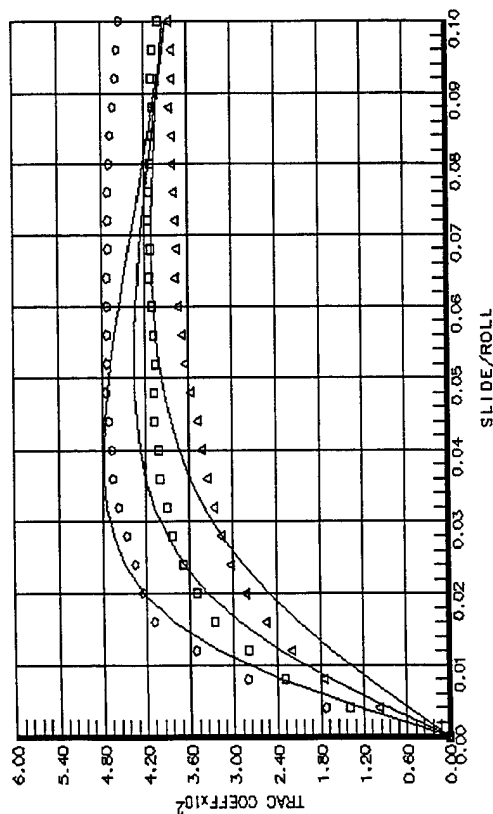
CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL

TYPE 1

col12.dat

1324MPA 89N 15.24M/S 339K #127 4.550E+00 2.000E-09 7.708E-02 BETA*
 1655MPA 169N 15.24M/S 339K #128 4.560E+00 2.000E-09 7.708E-02 ALFA*
 1985MPA 294N 15.24M/S 339K #129 4.560E+00 2.000E-09 7.708E-02 XMU*



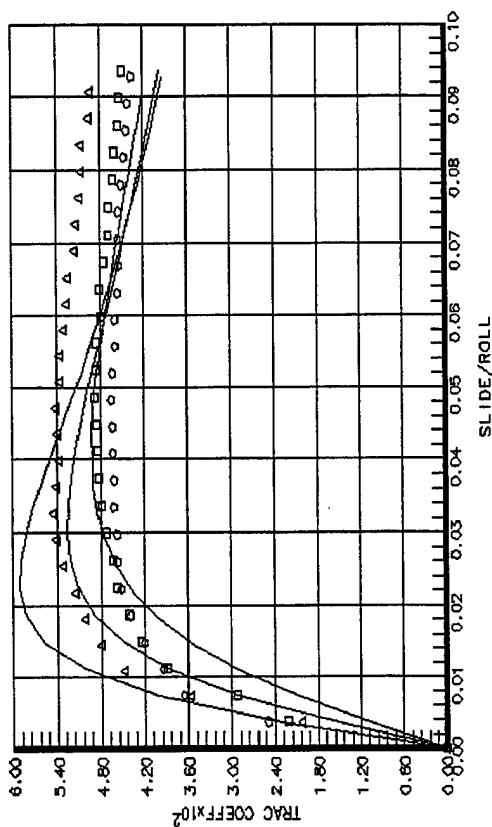
CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL

TYPE 1

col13.dat

1322MPA 89N 20.33M/S 339K #131 7.872E+00 2.000E-09 7.022E-02 BETA*
 1655MPA 169N 20.33M/S 339K #132 7.872E+00 2.000E-09 7.022E-02 ALFA*
 1985MPA 294N 20.33M/S 339K #133 7.872E+00 2.000E-09 7.022E-02 XMU*



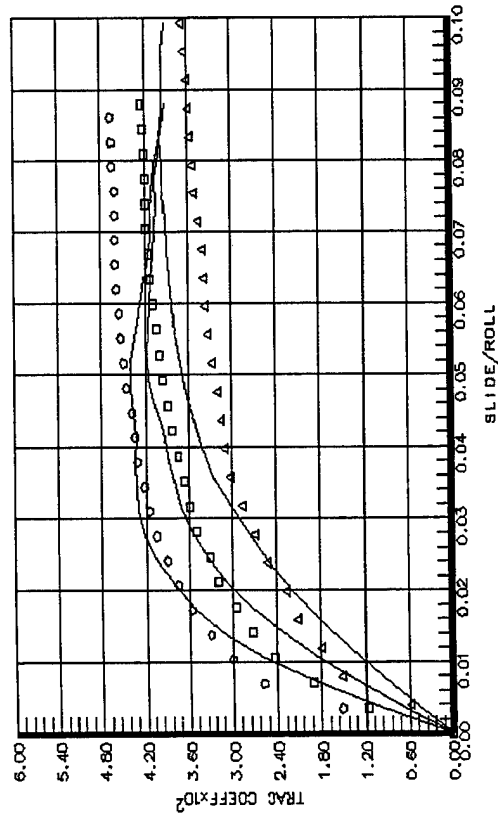
CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL

TYPE 1

col16.dat

1324MPA 89N 10.13M/S 367K #187 3.746E+00 2.000E-09 2.137E-01 BETA*
 1655MPA 169N 10.13M/S 367K #188 3.746E+00 2.000E-09 2.137E-01 ALFA*
 1985MPA 294N 10.13M/S 367K #189 3.746E+00 2.000E-09 2.137E-01 XMU*



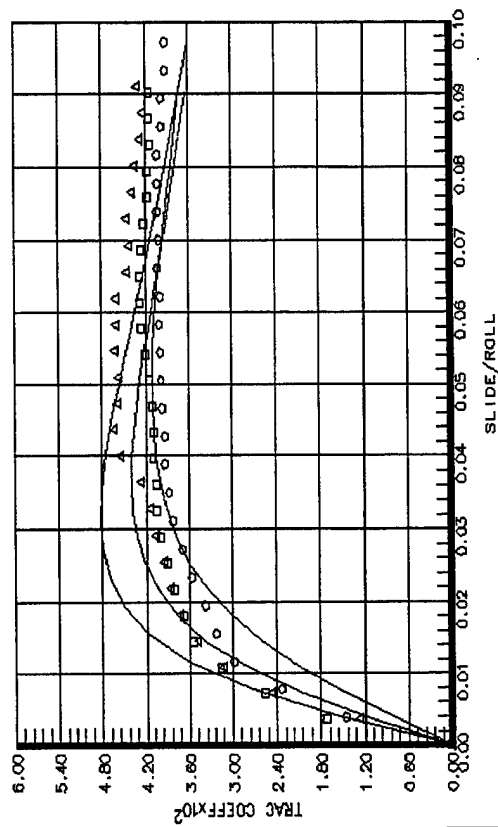
CO 90-715 ~220 Hatcol 3110

NEWTONIAN MODEL

TYPE 1

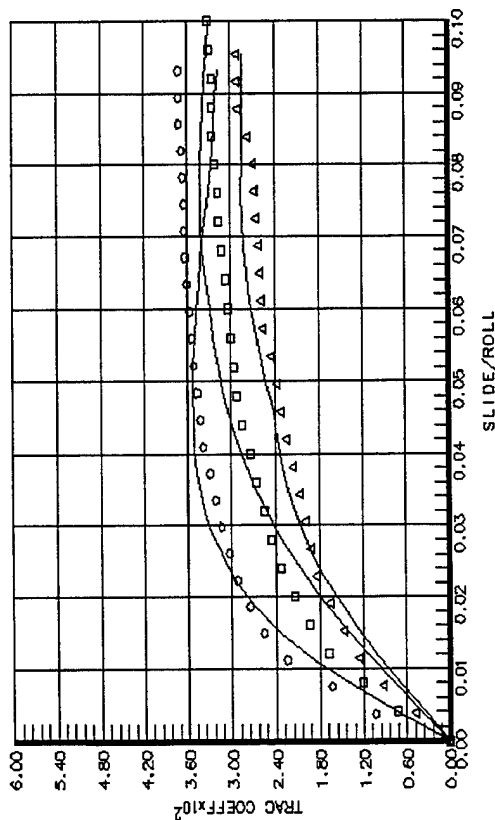
col17.dat

1323MPA 89N 20.33M/S 367K #195 3.509E+00 2.000E-09 8.703E-02 BETA*
 1655MPA 169N 20.33M/S 367K #196 3.509E+00 2.000E-09 8.703E-02 ALFA*
 1985MPA 294N 20.33M/S 367K #197 3.509E+00 2.000E-09 8.703E-02 XMU*



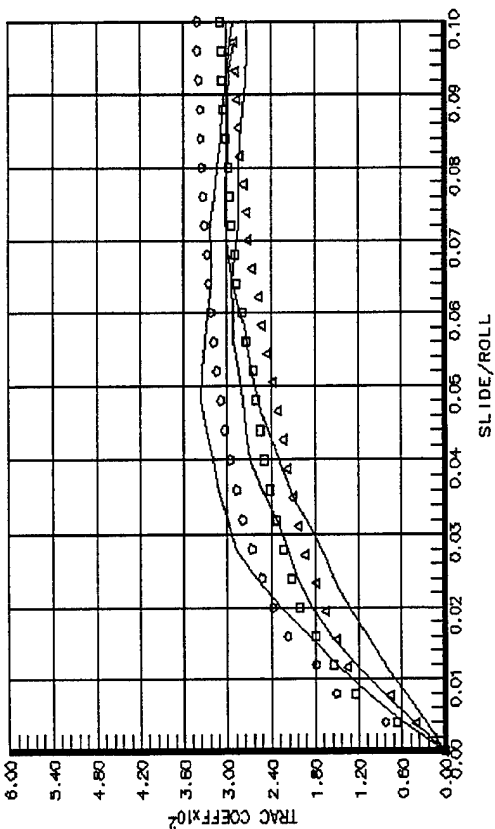
CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1

1324MPA 169N 16.24M/S 394K #240 1.173E+00 2.000E-09 1.360E-01
1695MPA 169N 16.24M/S 394K #241 1.173E+00 2.000E-09 1.360E-01
1985MPA 294N 16.24M/S 394K #242 1.173E+00 2.000E-09 1.360E-01



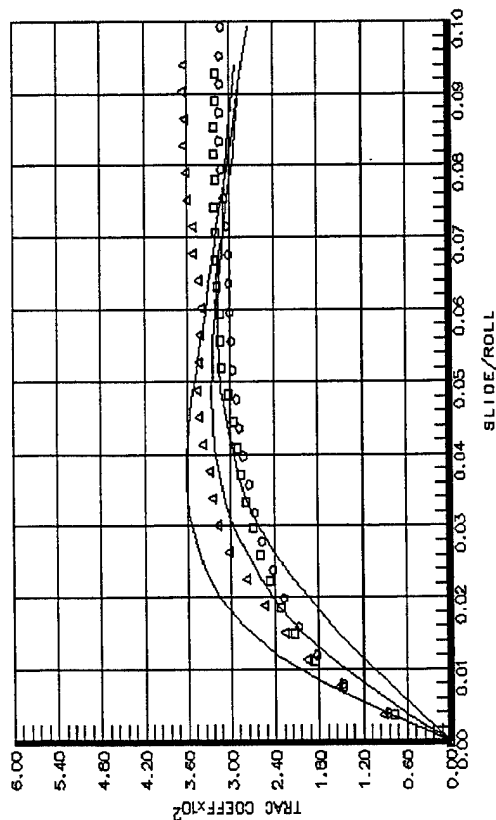
CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1

1322MPA 169N 16.24M/S 422K #252 8.978E-01 2.000E-08 2.287E-01
1684MPA 169N 16.24M/S 422K #253 8.978E-01 2.000E-08 2.287E-01
1985MPA 294N 16.24M/S 422K #254 8.978E-01 2.000E-08 2.287E-01



CO 90-715 ~220 Hatcol 3110
NEWTONIAN MODEL TYPE 1

1323MPA 169N 20.33M/S 422K #255 1.206E+00 2.000E-09 1.862E-01
1685MPA 169N 20.33M/S 422K #256 1.206E+00 2.000E-09 1.862E-01
1985MPA 294N 20.33M/S 422K #258 1.206E+00 2.000E-09 1.862E-01



12. Traction Data Set K: 90-715 Hatcol 3110/2

Data set name: CP 90-715 ~300 Hatcol 3110
Rolling radii [Disks 1 & 2] (in): 0.74 0.74
Crown radii [Disks 1 & 2] (in): 9.00 6.80

Number of data sets found = 232

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 7.74 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-05 | cp80l #1 |
| 2 | 80.00 | 18.39 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.97E-05 | cp80l #2 |
| 3 | 80.00 | 35.93 | 290.00 | 330.00 | 310.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-05 | cp80l #3 |
| 4 | 80.00 | 62.05 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.35E-05 | cp80l #4 |
| 5 | 80.00 | 98.62 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.38E-05 | cp80l #5 |
| 6 | 80.00 | 7.74 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.87E-06 | cp80l #6 |
| 7 | 80.00 | 18.39 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.37E-06 | cp80l #7 |
| 8 | 80.00 | 35.93 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.19E-05 | cp80l #8 |
| 9 | 80.00 | 62.05 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.44E-05 | cp80l #9 |
| 10 | 80.00 | 98.62 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-04 | cp80l #10 |
| 11 | 80.00 | 7.74 | 1215.00 | 1345.00 | 1280.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-05 | cp80l #11 |
| 12 | 80.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.60E-06 | cp80l #12 |
| 13 | 80.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.63E-06 | cp80l #13 |
| 14 | 80.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.32E-05 | cp80l #14 |
| 15 | 80.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-05 | cp80l #15 |
| 16 | 80.00 | 147.11 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.32E-05 | cp80lx #1 |
| 17 | 80.00 | 147.11 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-04 | cp80lx #2 |
| 18 | 80.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-04 | cp80lx #3 |
| 19 | 80.00 | 7.74 | 2470.00 | 2735.00 | 2602.50 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.19E-05 | cp80m #1 |
| 20 | 80.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.30E-05 | cp80m #2 |
| 21 | 80.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-05 | cp80m #3 |
| 22 | 80.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.49E-05 | cp80m #4 |
| 23 | 80.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-05 | cp80m #5 |
| 24 | 80.00 | 7.74 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.14E-05 | cp80m #6 |
| 25 | 80.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.31E-06 | cp80m #7 |
| 26 | 80.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.94E-05 | cp80m #8 |
| 27 | 80.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.14E-05 | cp80m #9 |
| 28 | 80.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.65E-05 | cp80m #10 |
| 29 | 80.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.45E-05 | cp80mx #1 |
| 30 | 80.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.45E-05 | cp80mx #2 |
| 31 | 80.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.12E-05 | cp80h #1 |
| 32 | 80.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 43 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.94E-06 | cp80h #2 |
| 33 | 80.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.76E-05 | cp80h #3 |
| 34 | 80.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.33E-06 | cp80h #4 |
| 35 | 80.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.87E-05 | cp80h #5 |
| 36 | 80.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.43E-04 | cp80h #6 |
| 37 | 80.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.05E-05 | cp80h #7 |
| 38 | 80.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.69E-05 | cp80h #8 |
| 39 | 80.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 6 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-05 | cp80hxx #1 |
| 40 | 80.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 43 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.94E-06 | cp80hxx #2 |
| 41 | 80.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 3 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.96E-05 | cp80hxx #3 |
| 42 | 80.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 18 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.76E-03 | cp80hxx #5 |
| 43 | 100.00 | 7.74 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-04 | cp100l #1 |
| 44 | 100.00 | 18.39 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-05 | cp100l #2 |
| 45 | 100.00 | 35.93 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.70E-05 | cp100l #3 |
| 46 | 100.00 | 62.05 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.55E-05 | cp100l #4 |
| 47 | 100.00 | 98.62 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.13E-04 | cp100l #5 |
| 48 | 100.00 | 7.74 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-05 | cp100l #6 |
| 49 | 100.00 | 18.39 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.83E-06 | cp100l #7 |
| 50 | 100.00 | 35.93 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.76E-06 | cp100l #8 |

Data set: CP 90-715 ~300 Hatcol 3110continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|----------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 62.05 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.05E-06 | cp100l #9 |
| 52 | 100.00 | 98.62 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-05 | cp100l #10 |
| 53 | 100.00 | 7.74 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-05 | cp100l #11 |
| 54 | 100.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-06 | cp100l #12 |
| 55 | 100.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.10E-06 | cp100l #13 |
| 56 | 100.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.14E-06 | cp100l #14 |
| 57 | 100.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-05 | cp100l #15 |
| 58 | 100.00 | 147.11 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.32E-04 | cp100lx #1 |
| 59 | 100.00 | 147.11 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.12E-05 | cp100lx #2 |
| 60 | 100.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.94E-05 | cp100lx #3 |
| 61 | 100.00 | 7.74 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.55E-05 | cp100m #1 |
| 62 | 100.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.47E-05 | cp100m #2 |
| 63 | 100.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.83E-06 | cp100m #3 |
| 64 | 100.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.87E-05 | cp100m #4 |
| 65 | 100.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-05 | cp100m #5 |
| 66 | 100.00 | 7.74 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.69E-04 | cp100m #6 |
| 67 | 100.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.23E-05 | cp100m #7 |
| 68 | 100.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.32E-06 | cp100m #8 |
| 69 | 100.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.23E-06 | cp100m #9 |
| 70 | 100.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.40E-06 | cp100m #10 |
| 71 | 100.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.41E-05 | cp100mx #1 |
| 72 | 100.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.85E-05 | cp100mx #2 |
| 73 | 100.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.59E-05 | cp100h #1 |
| 74 | 100.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.54E-05 | cp100h #2 |
| 75 | 100.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.46E-06 | cp100h #3 |
| 76 | 100.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.90E-05 | cp100h #4 |
| 77 | 100.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.62E-05 | cp100h #5 |
| 78 | 100.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.75E-05 | cp100h #6 |
| 79 | 100.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.85E-05 | cp100h #7 |
| 80 | 100.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-05 | cp100h #8 |
| 81 | 100.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.13E-05 | cp100hxx #1 |
| 82 | 100.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 42 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.52E-05 | cp100hxx #2 |
| 83 | 100.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.45E-06 | cp100hxx #3 |
| 84 | 100.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.85E-06 | cp100hxx #4 |
| 85 | 100.00 | 18.39 | 8170.00 | 7370.00 | 7770.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.29E-05 | cp100hxx #5 |
| 86 | 100.00 | 35.93 | 8170.00 | 7370.00 | 7770.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-05 | cp100hxx #6 |
| 87 | 100.00 | 62.05 | 8170.00 | 7370.00 | 7770.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.28E-06 | cp100hxx #7 |
| 88 | 100.00 | 98.62 | 8170.00 | 7370.00 | 7770.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.31E-06 | cp100hxx #8 |
| 89 | 100.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-04 | cp100hxx #9 |
| 90 | 100.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 42 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.56E-04 | cp100hxx #10 |
| 91 | 100.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.72E-06 | cp100hxx #11 |
| 92 | 100.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.20E-05 | cp100hxx #12 |
| 93 | 100.00 | 18.39 | 10880.00 | 9860.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.43E-05 | cp100hxx #13 |
| 94 | 100.00 | 35.93 | 10880.00 | 9860.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.34E-04 | cp100hxx #14 |
| 95 | 100.00 | 62.05 | 10880.00 | 9860.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.52E-06 | cp100hxx #15 |
| 96 | 100.00 | 98.62 | 10880.00 | 9860.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.65E-05 | cp100hxx #16 |
| 97 | 150.00 | 18.39 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-05 | cp150l #1 |
| 98 | 150.00 | 35.93 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.76E-05 | cp150l #2 |
| 99 | 150.00 | 62.05 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.24E-05 | cp150l #3 |
| 100 | 150.00 | 98.62 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.28E-04 | cp150l #4 |
| 101 | 150.00 | 18.39 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-05 | cp150l #5 |
| 102 | 150.00 | 35.93 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.94E-06 | cp150l #6 |
| 103 | 150.00 | 62.05 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.84E-06 | cp150l #7 |
| 104 | 150.00 | 98.62 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-05 | cp150l #8 |
| 105 | 150.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.22E-06 | cp150l #9 |
| 106 | 150.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.77E-07 | cp150l #10 |
| 107 | 150.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.54E-05 | cp150l #11 |
| 108 | 150.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.01E-05 | cp150l #12 |
| 109 | 150.00 | 147.11 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-04 | cp150lx #1 |
| 110 | 150.00 | 147.11 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-05 | cp150lx #2 |
| 111 | 150.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.83E-06 | cp150lx #3 |
| 112 | 150.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.28E-05 | cp150m #1 |
| 113 | 150.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-06 | cp150m #2 |
| 114 | 150.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.18E-05 | cp150m #3 |
| 115 | 150.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.64E-06 | cp150m #4 |
| 116 | 150.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.54E-05 | cp150m #5 |
| 117 | 150.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.63E-06 | cp150m #6 |
| 118 | 150.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.20E-06 | cp150m #7 |
| 119 | 150.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.18E-06 | cp150m #8 |
| 120 | 150.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.42E-05 | cp150mx #1 |

Data set: CP 90-715 ~300 Hatcol 3110continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 150.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.63E-05 | cp150mx #2 |
| 122 | 150.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.00E-05 | cp150h #1 |
| 123 | 150.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.27E-05 | cp150h #2 |
| 124 | 150.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.99E-06 | cp150h #3 |
| 125 | 150.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.46E-06 | cp150h #4 |
| 126 | 150.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.03E-05 | cp150h #5 |
| 127 | 150.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.41E-04 | cp150h #6 |
| 128 | 150.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.96E-06 | cp150h #7 |
| 129 | 150.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.19E-06 | cp150h #8 |
| 130 | 200.00 | 18.39 | 290.00 | 330.00 | 310.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.85E-05 | cp200l #1 |
| 131 | 200.00 | 35.93 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.58E-05 | cp200l #2 |
| 132 | 200.00 | 62.05 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-04 | cp200l #3 |
| 133 | 200.00 | 98.62 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.51E-04 | cp200l #4 |
| 134 | 200.00 | 18.39 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-05 | cp200l #5 |
| 135 | 200.00 | 35.93 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-05 | cp200l #6 |
| 136 | 200.00 | 62.05 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.15E-05 | cp200l #7 |
| 137 | 200.00 | 98.62 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.94E-06 | cp200l #8 |
| 138 | 200.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.10E-06 | cp200l #9 |
| 139 | 200.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.07E-06 | cp200l #10 |
| 140 | 200.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.22E-07 | cp200l #11 |
| 141 | 200.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.61E-05 | cp200l #12 |
| 142 | 200.00 | 147.11 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.84E-05 | cp200lx #1 |
| 143 | 200.00 | 147.11 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.55E-06 | cp200lx #2 |
| 144 | 200.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-05 | cp200lx #3 |
| 145 | 200.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.69E-05 | cp200m #1 |
| 146 | 200.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.87E-06 | cp200m #2 |
| 147 | 200.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.54E-06 | cp200m #3 |
| 148 | 200.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.31E-06 | cp200m #4 |
| 149 | 200.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.38E-05 | cp200m #5 |
| 150 | 200.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.32E-05 | cp200m #6 |
| 151 | 200.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.20E-06 | cp200m #7 |
| 152 | 200.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-05 | cp200m #8 |
| 153 | 200.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-05 | cp200mx #1 |
| 154 | 200.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.08E-05 | cp200mx #2 |
| 155 | 200.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 41 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.11E-06 | cp200h #1 |
| 156 | 200.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.20E-05 | cp200h #2 |
| 157 | 200.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 44 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.56E-06 | cp200h #3 |
| 158 | 200.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.16E-07 | cp200h #4 |
| 159 | 200.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.97E-04 | cp200h #5 |
| 160 | 200.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.84E-05 | cp200h #6 |
| 161 | 200.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.24E-05 | cp200h #7 |
| 162 | 200.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.11E-06 | cp200h #8 |
| 163 | 250.00 | 18.39 | 290.00 | 330.00 | 310.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.21E-04 | cp250l #1 |
| 164 | 250.00 | 35.93 | 290.00 | 330.00 | 310.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.92E-04 | cp250l #2 |
| 165 | 250.00 | 62.05 | 290.00 | 330.00 | 310.00 | 26 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.81E-04 | cp250l #3 |
| 166 | 250.00 | 98.62 | 290.00 | 330.00 | 310.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.69E-03 | cp250l #4 |
| 167 | 250.00 | 147.11 | 290.00 | 330.00 | 310.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.63E-03 | cp250l #5 |
| 168 | 250.00 | 18.39 | 620.00 | 700.00 | 660.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.80E-05 | cp250l #6 |
| 169 | 250.00 | 35.93 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-04 | cp250l #7 |
| 170 | 250.00 | 62.05 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.68E-05 | cp250l #8 |
| 171 | 250.00 | 98.62 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.64E-05 | cp250l #9 |
| 172 | 250.00 | 147.11 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.58E-05 | cp250l #10 |
| 173 | 250.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-06 | cp250l #11 |
| 174 | 250.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.26E-06 | cp250l #12 |
| 175 | 250.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.88E-06 | cp250l #13 |
| 176 | 250.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.02E-05 | cp250l #14 |
| 177 | 250.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.51E-05 | cp250l #15 |
| 178 | 250.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.05E-06 | cp250m #1 |
| 179 | 250.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.16E-06 | cp250m #2 |
| 180 | 250.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.32E-06 | cp250m #3 |
| 181 | 250.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.49E-05 | cp250m #4 |
| 182 | 250.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.81E-06 | cp250m #5 |
| 183 | 250.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.41E-05 | cp250m #6 |
| 184 | 250.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.06E-05 | cp250m #7 |
| 185 | 250.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.74E-07 | cp250m #8 |
| 186 | 250.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.61E-06 | cp250m #9 |
| 187 | 250.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 48 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.79E-07 | cp250m #10 |
| 188 | 250.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 40 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-04 | cp250h #1 |
| 189 | 250.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 42 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.17E-06 | cp250h #2 |
| 190 | 250.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-05 | cp250h #3 |

Data set: CP 90-715 ~300 Hatcol 3110continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 191 | 250.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.26E-06 | cp250h #4 |
| 192 | 250.00 | 147.11 | 7370.00 | 8170.00 | 7770.00 | 44 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-06 | cp250h #5 |
| 193 | 250.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.44E-05 | cp250h #6 |
| 194 | 250.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.52E-04 | cp250h #7 |
| 195 | 250.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.06E-05 | cp250h #8 |
| 196 | 250.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.57E-06 | cp250h #9 |
| 197 | 250.00 | 147.11 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-05 | cp250h #10 |
| 198 | 300.00 | 18.39 | 290.00 | 330.00 | 310.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.66E-03 | cp300l #1 |
| 199 | 300.00 | 35.93 | 290.00 | 330.00 | 310.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.39E-04 | cp300l #2 |
| 200 | 300.00 | 62.05 | 290.00 | 330.00 | 310.00 | 25 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.06E-04 | cp300l #3 |
| 201 | 300.00 | 98.62 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.96E-04 | cp300l #4 |
| 202 | 300.00 | 147.11 | 290.00 | 330.00 | 310.00 | 28 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-04 | cp300l #5 |
| 203 | 300.00 | 18.39 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.74E-04 | cp300l #6 |
| 204 | 300.00 | 35.93 | 620.00 | 700.00 | 660.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.29E-05 | cp300l #7 |
| 205 | 300.00 | 62.05 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.26E-04 | cp300l #8 |
| 206 | 300.00 | 98.62 | 620.00 | 700.00 | 660.00 | 27 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-04 | cp300l #9 |
| 207 | 300.00 | 147.11 | 620.00 | 700.00 | 660.00 | 29 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.29E-04 | cp300l #10 |
| 208 | 300.00 | 18.39 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.35E-04 | cp300l #11 |
| 209 | 300.00 | 35.93 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.92E-05 | cp300l #12 |
| 210 | 300.00 | 62.05 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.67E-06 | cp300l #13 |
| 211 | 300.00 | 98.62 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.77E-06 | cp300l #14 |
| 212 | 300.00 | 147.11 | 1215.00 | 1345.00 | 1280.00 | 30 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.32E-05 | cp300l #15 |
| 213 | 300.00 | 18.39 | 2470.00 | 2735.00 | 2602.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.37E-04 | cp300m #1 |
| 214 | 300.00 | 35.93 | 2470.00 | 2735.00 | 2602.50 | 44 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.96E-06 | cp300m #2 |
| 215 | 300.00 | 62.05 | 2470.00 | 2735.00 | 2602.50 | 44 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.97E-06 | cp300m #3 |
| 216 | 300.00 | 98.62 | 2470.00 | 2735.00 | 2602.50 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.41E-07 | cp300m #4 |
| 217 | 300.00 | 147.11 | 2470.00 | 2735.00 | 2602.50 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.67E-05 | cp300m #5 |
| 218 | 300.00 | 18.39 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-04 | cp300m #6 |
| 219 | 300.00 | 35.93 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.45E-05 | cp300m #7 |
| 220 | 300.00 | 62.05 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.75E-06 | cp300m #8 |
| 221 | 300.00 | 98.62 | 4900.00 | 5430.00 | 5165.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.97E-06 | cp300m #9 |
| 222 | 300.00 | 147.11 | 4900.00 | 5430.00 | 5165.00 | 49 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.58E-07 | cp300m #10 |
| 223 | 300.00 | 18.39 | 7370.00 | 8170.00 | 7770.00 | 44 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.44E-04 | cp300h #1 |
| 224 | 300.00 | 35.93 | 7370.00 | 8170.00 | 7770.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-05 | cp300h #2 |
| 225 | 300.00 | 62.05 | 7370.00 | 8170.00 | 7770.00 | 45 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.05E-06 | cp300h #3 |
| 226 | 300.00 | 98.62 | 7370.00 | 8170.00 | 7770.00 | 43 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.87E-06 | cp300h #4 |
| 227 | 300.00 | 147.11 | 7370.00 | 8170.00 | 7770.00 | 43 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.02E-06 | cp300h #5 |
| 228 | 300.00 | 18.39 | 9860.00 | 10880.00 | 10370.00 | 43 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | cp300h #6 |
| 229 | 300.00 | 35.93 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.05E-05 | cp300h #7 |
| 230 | 300.00 | 62.05 | 9860.00 | 10880.00 | 10370.00 | 46 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-05 | cp300h #8 |
| 231 | 300.00 | 98.62 | 9860.00 | 10880.00 | 10370.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.51E-06 | cp300h #9 |
| 232 | 300.00 | 147.11 | 9860.00 | 10880.00 | 10370.00 | 47 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.04E-06 | cp300h #10 |

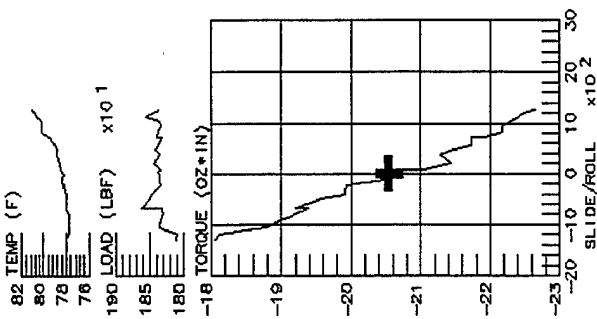
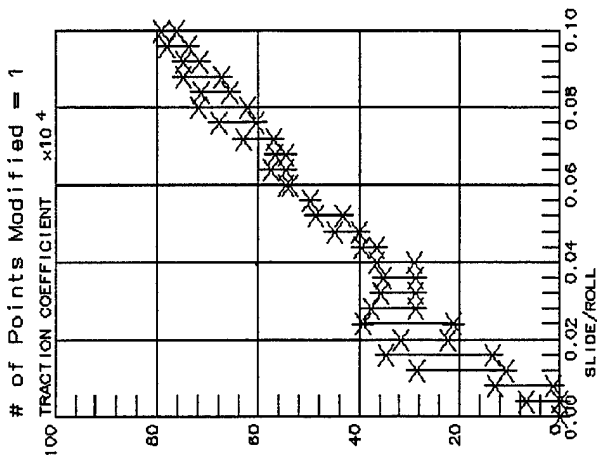
Summary of Select Data Files

| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-----------------|
| cp1.dat | 80.00 | 660.00 | 8 9 10 17 |
| cp2.dat | 80.00 | 1280.00 | 13 14 15 18 |
| cp3.dat | 80.00 | 2603.00 | 21 22 23 29 |
| cp4.dat | 80.00 | 5165.00 | 26 27 28 30 |
| cp5.dat | 80.00 | 7770.00 | 40 33 34 |
| cp6.dat | 80.00 | 10370.00 | 36 37 38 |
| cp7.dat | 100.00 | 660.00 | 50 51 52 59 |
| cp8.dat | 100.00 | 1280.00 | 55 56 57 60 |
| cp9.dat | 100.00 | 2603.00 | 63 64 65 71 |
| cp10.dat | 100.00 | 5165.00 | 68 69 70 72 |
| cp11.dat | 100.00 | 7770.00 | 86 75 88 |
| cp12.dat | 100.00 | 10370.00 | 78 95 80 |
| cp13.dat | 150.00 | 660.00 | 102 103 104 110 |
| cp14.dat | 150.00 | 1280.00 | 106 107 108 111 |
| cp15.dat | 150.00 | 2603.00 | 113 114 115 120 |
| cp16.dat | 150.00 | 5165.00 | 117 118 119 121 |
| cp17.dat | 150.00 | 7770.00 | 123 124 125 |
| cp18.dat | 150.00 | 10370.00 | 127 128 129 |
| cp19.dat | 200.00 | 660.00 | 135 136 137 143 |
| cp20.dat | 200.00 | 1280.00 | 139 140 141 144 |
| cp21.dat | 200.00 | 2603.00 | 146 147 148 153 |
| cp22.dat | 200.00 | 5165.00 | 150 151 152 154 |
| cp23.dat | 200.00 | 7770.00 | 156 157 158 |
| cp24.dat | 200.00 | 10370.00 | 160 161 162 |
| cp25.dat | 250.00 | 660.00 | 169 170 171 172 |
| cp26.dat | 250.00 | 1280.00 | 174 175 176 177 |
| cp27.dat | 250.00 | 2603.00 | 179 180 181 182 |
| cp28.dat | 250.00 | 5165.00 | 184 185 186 187 |
| cp29.dat | 250.00 | 7770.00 | 189 190 191 192 |
| cp30.dat | 250.00 | 10370.00 | 194 195 196 197 |
| cp31.dat | 300.00 | 660.00 | 204 205 206 207 |
| cp32.dat | 300.00 | 1280.00 | 209 210 211 212 |
| cp33.dat | 300.00 | 2603.00 | 214 215 216 217 |
| cp34.dat | 300.00 | 5165.00 | 219 220 221 222 |
| cp35.dat | 300.00 | 7770.00 | 224 225 226 227 |
| cp36.dat | 300.00 | 10370.00 | 229 230 231 232 |

#2

CP 90-715 ~300 Hatcol 3110
80F 18LBF 310RPM 2 FILE: cp801

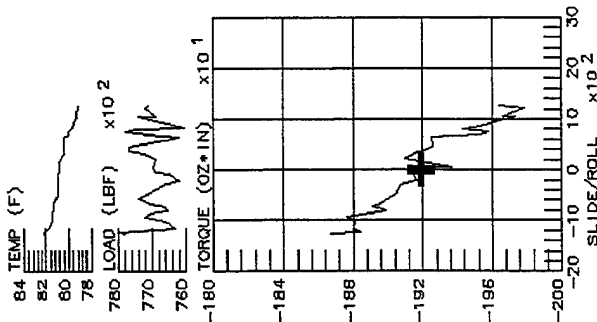
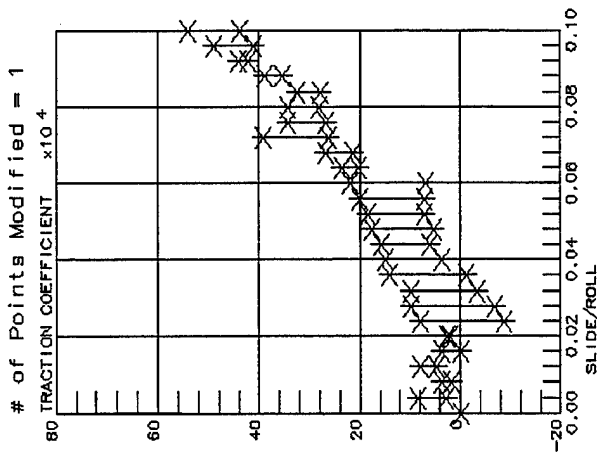
of Points Modified = 1



#1

CP 90-715 ~300 Hatcol 3110
80F 8LBF 310RPM 1 FILE: cp801

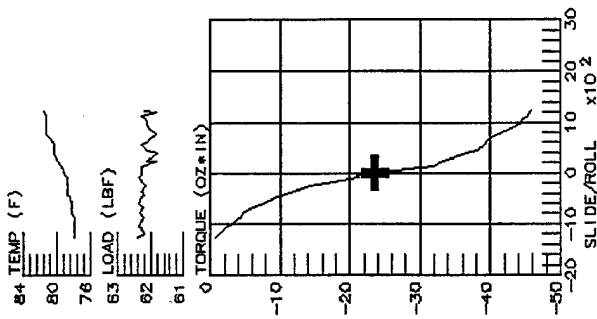
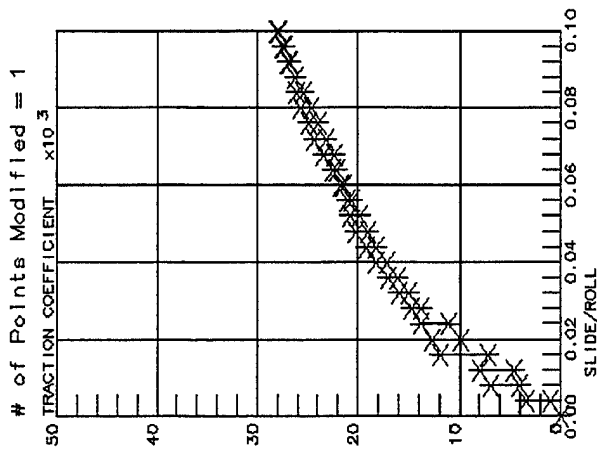
of Points Modified = 1



#4

CP 90-715 ~300 Hatcol 3110
80F 62LBF 310RPM 4 FILE: cp801

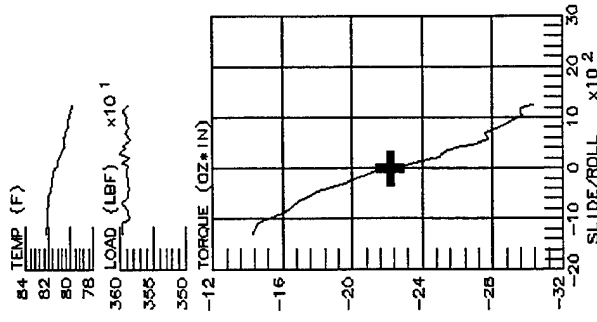
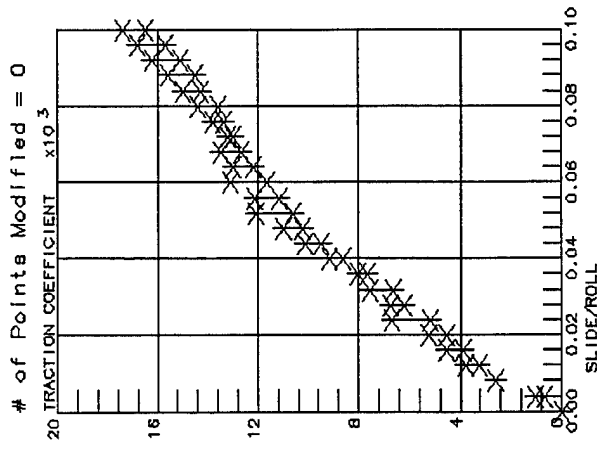
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#3

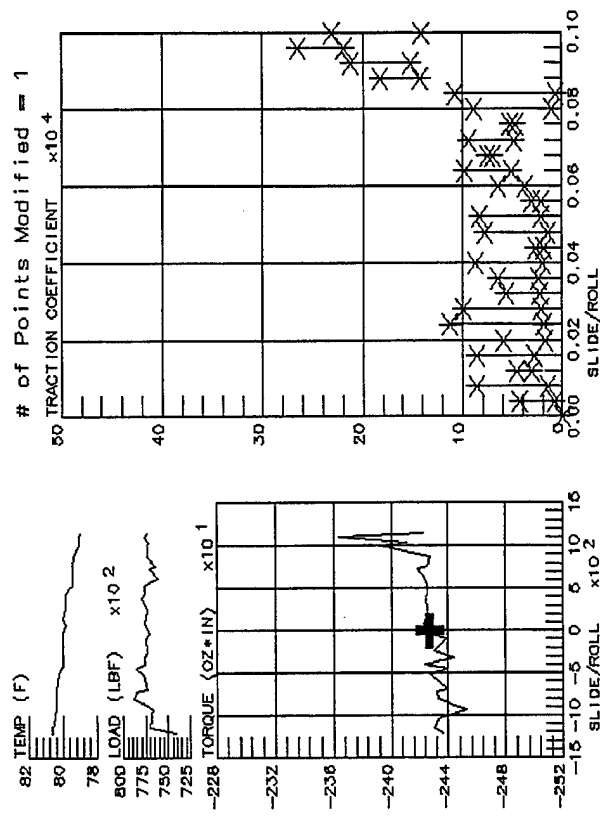
CP 90-715 ~300 Hatcol 3110
80F 36LBF 310RPM 3 FILE: cp801

of Points Modified = 0



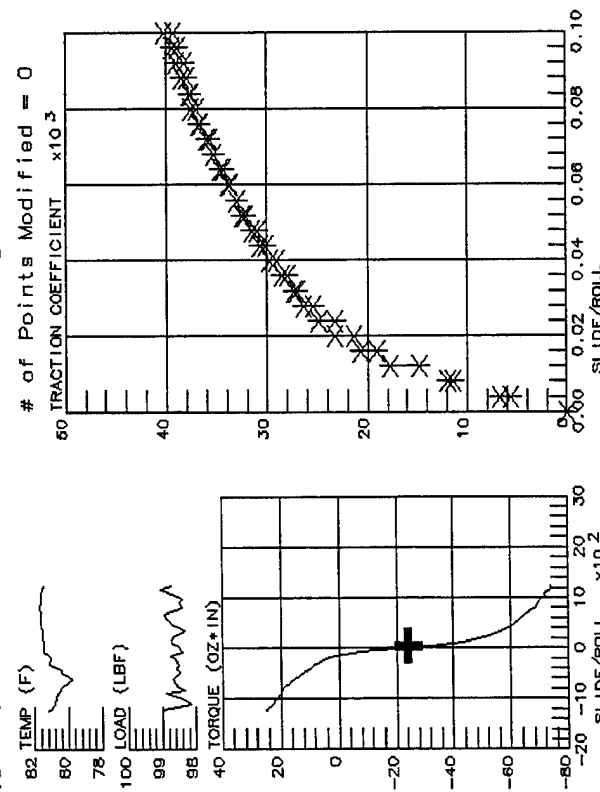
CP 90-715 ~300 Hatcol 3110 #8
80F 8LBF 660RPM 8 FILE: cp801

of Points Modified = 1



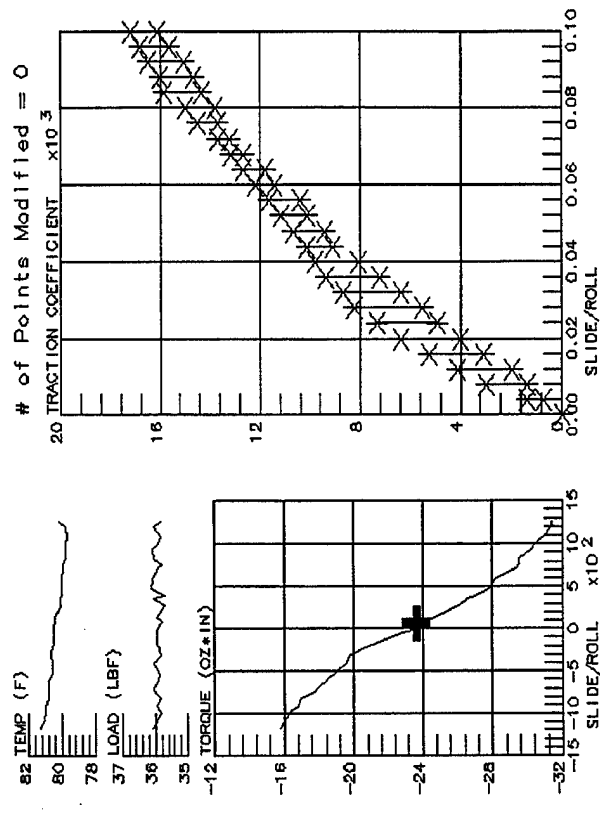
CP 90-715 ~300 Hatcol 3110 #5
80F 99LBF 310RPM 5 FILE: cp801

of Points Modified = 0



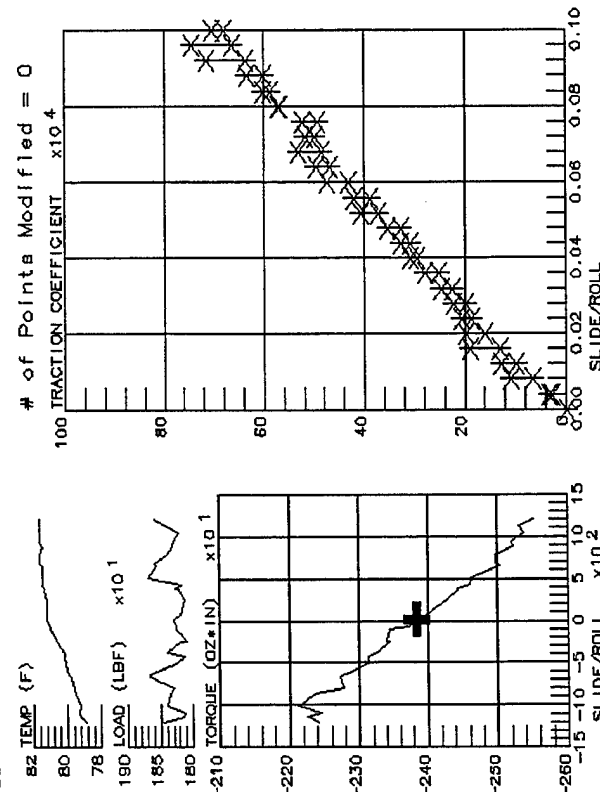
CP 90-715 ~300 Hatcol 3110 #8
80F 36LBF 660RPM 8 FILE: cp801

of Points Modified = 0

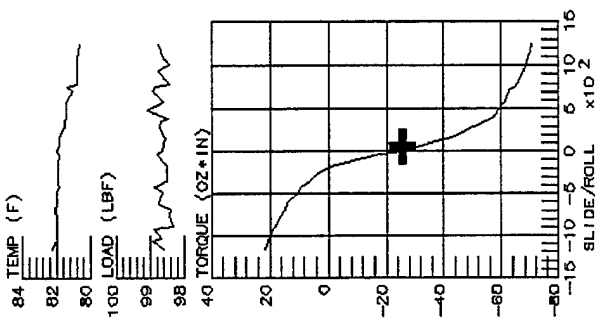
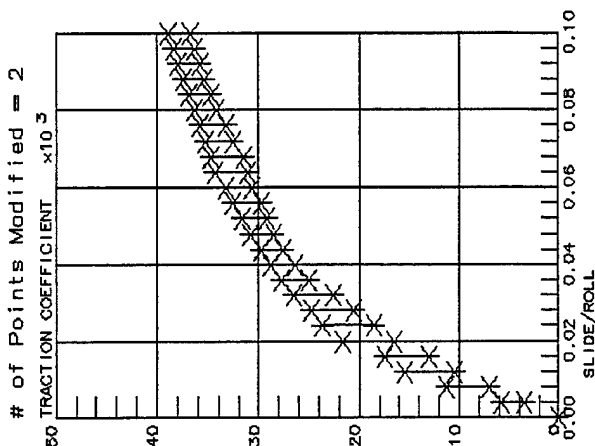


CP 90-715 ~300 Hatcol 3110 #7
80F 18LBF 660RPM 7 FILE: cp801

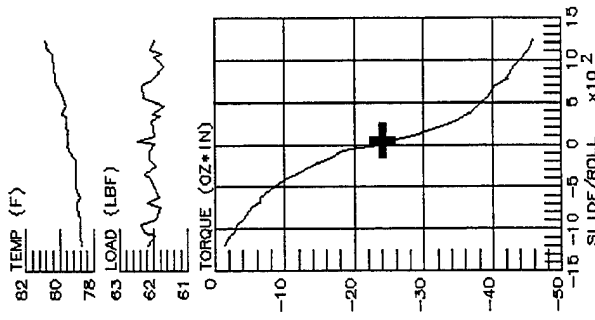
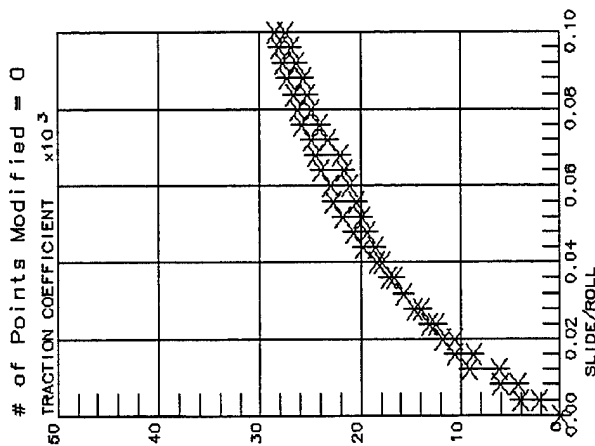
of Points Modified = 0



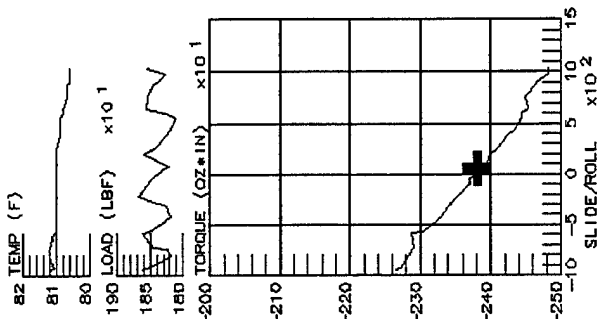
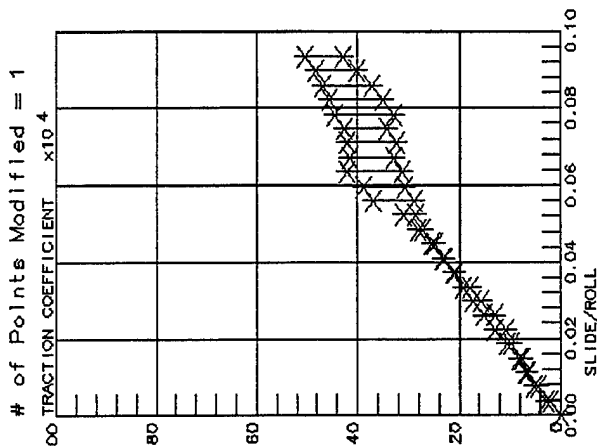
CP 90-715 ~300 Hatcol 3110 #10
80F 99LBF 660RPM 10 FILE: cp801



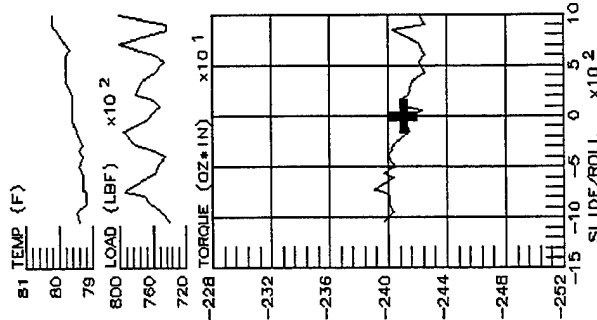
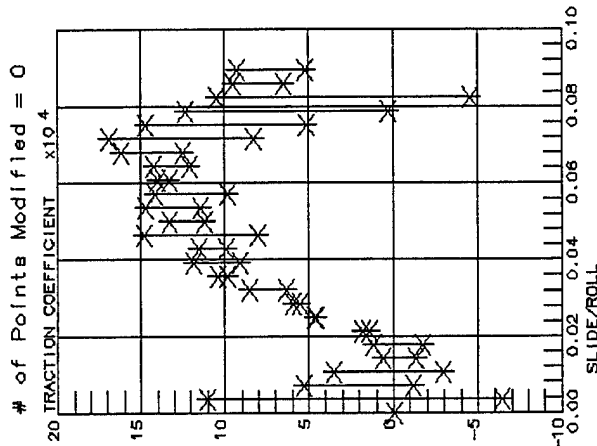
CP 90-715 ~300 Hatcol 3110 #9
80F 62LBF 660RPM 9 FILE: cp801



CP 90-715 ~300 Hatcol 3110 #12
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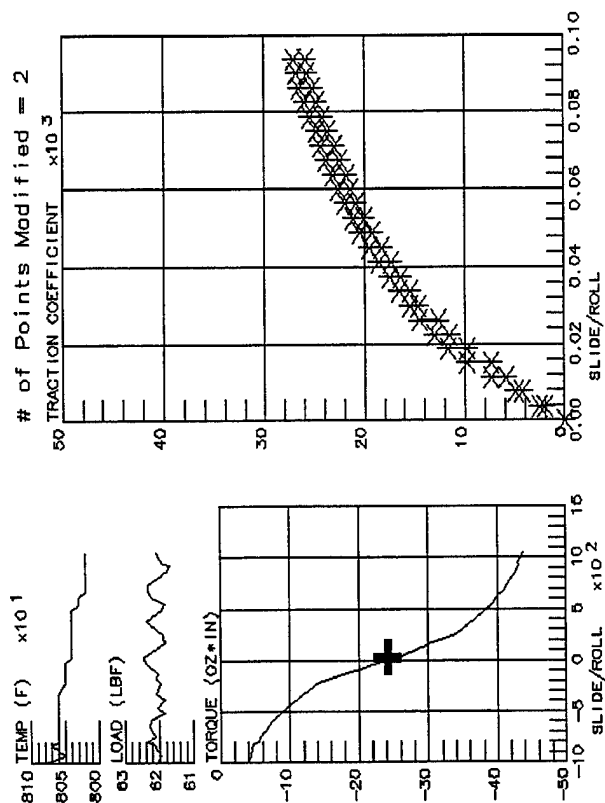


CP 90-715 ~300 Hatcol 3110 #11
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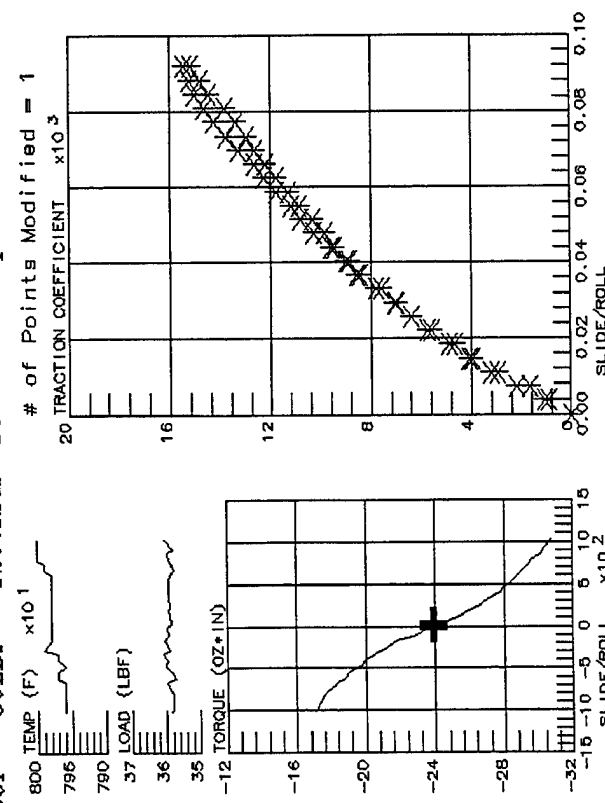
CP 90-715 ~300 Hatcol 3110 #14
80F 62LBF 1280RPM 14 FILE: cp801

of Points Modified = 2



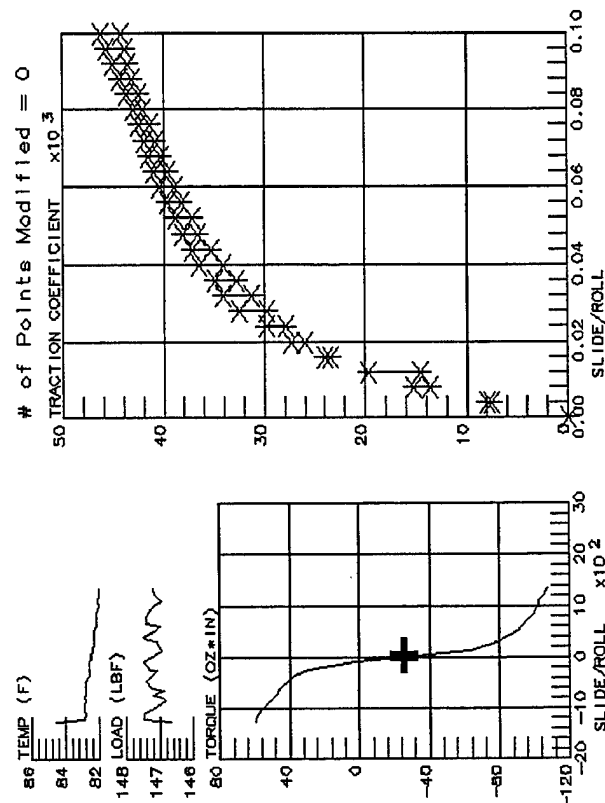
CP 90-715 ~300 Hatcol 3110 #13
80F 36LBF 1280RPM 13 FILE: cp801

of Points Modified = 1



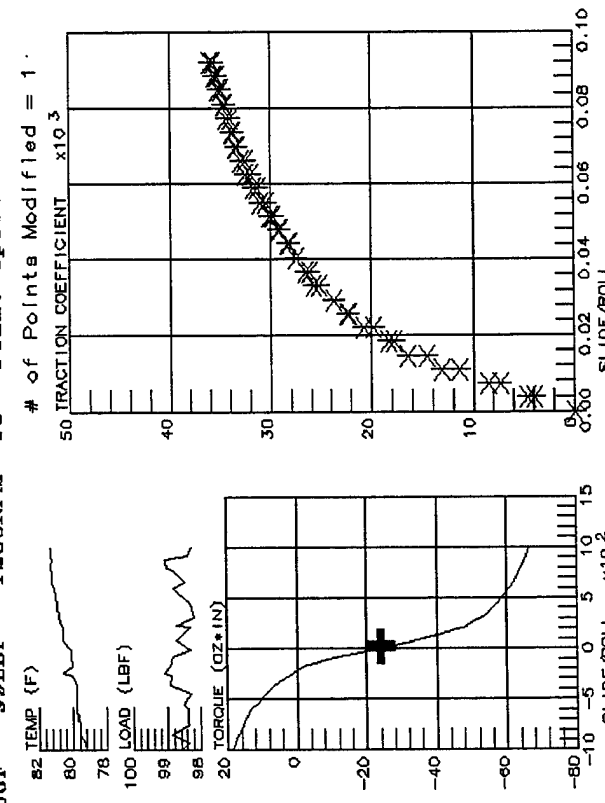
CP 90-715 ~300 Hatcol 3110 #16
80F 147LBF 310RPM 1 FILE: cp801x

of Points Modified = 0

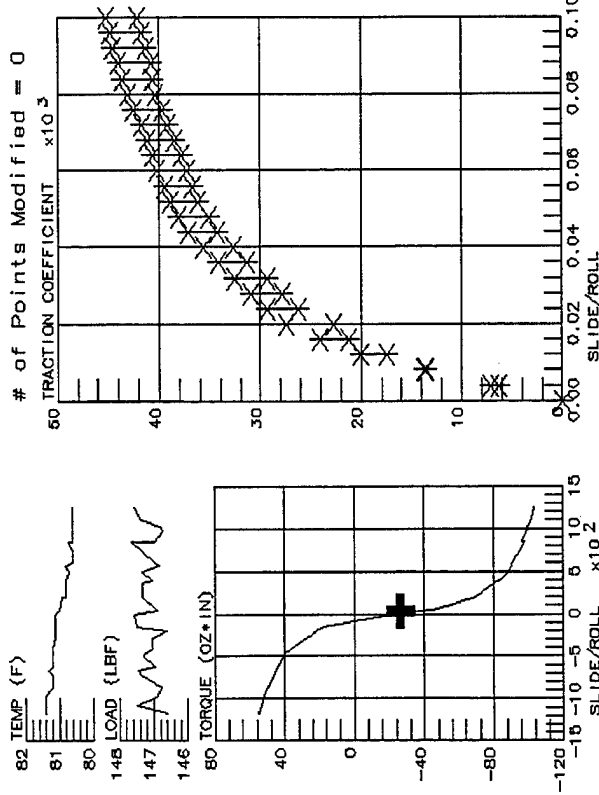


CP 90-715 ~300 Hatcol 3110 #15
80F 99LBF 1280RPM 15 FILE: cp801

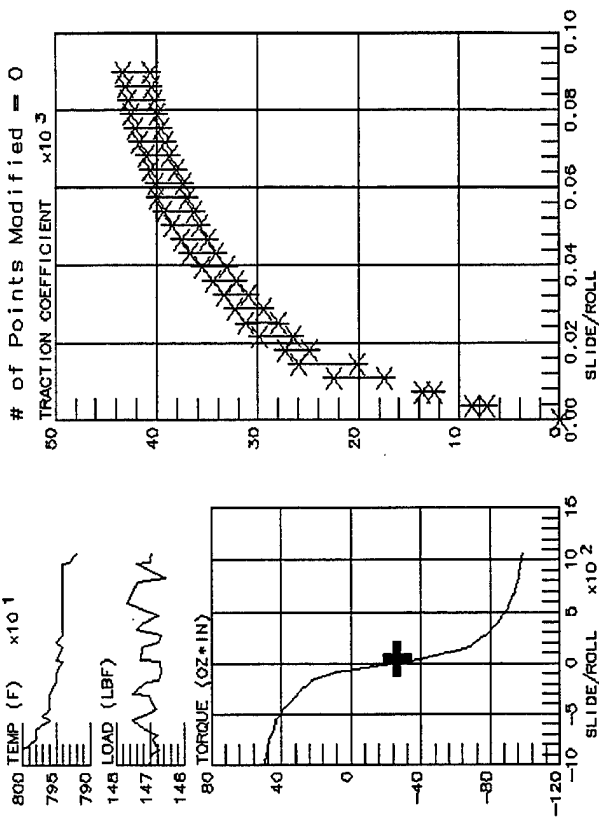
of Points Modified = 1



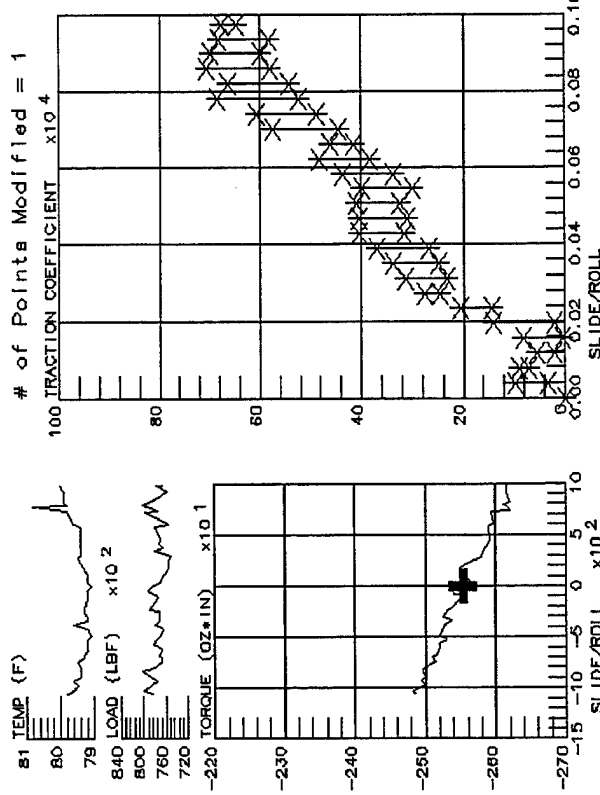
CP 90-715 ~300 Hatcol 3110 #17
80F 147LBF 680RPM 2 FILE: cp801x



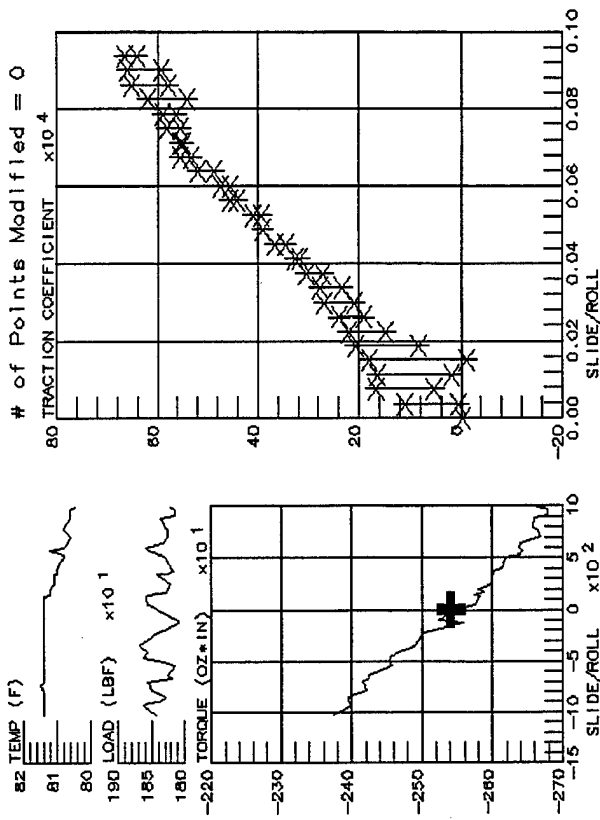
CP 90-715 ~300 Hatcol 3110 #18
80F 147LBF 1280RPM 3 FILE: cp801x



CP 90-715 ~300 Hatcol 3110 #19
80F 8LBF 2603RPM 1 FILE: cp80m



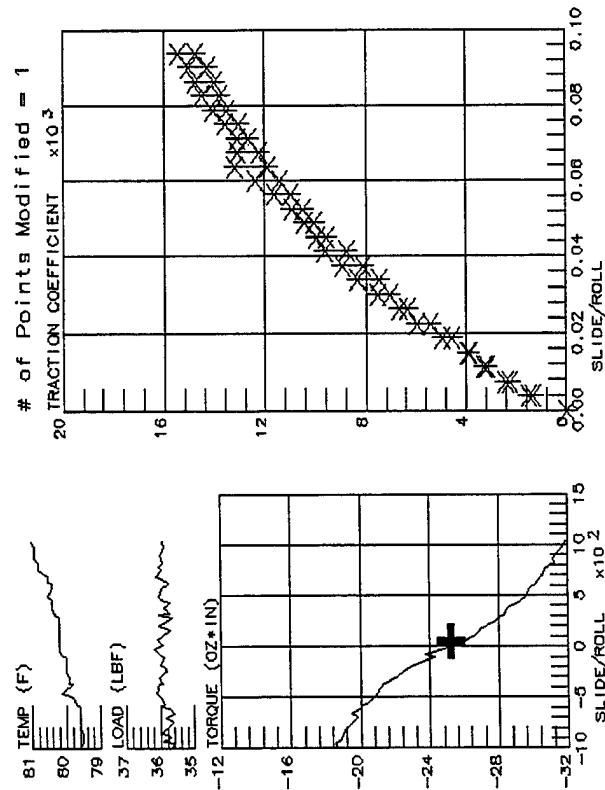
CP 90-715 ~300 Hatcol 3110 #20
80F 18LBF 2603RPM 2 FILE: cp80m



CP 90-715 ~300 Hatcol 3110
80F 36LBF 2603RPM 3 FILE: cp80m

#21

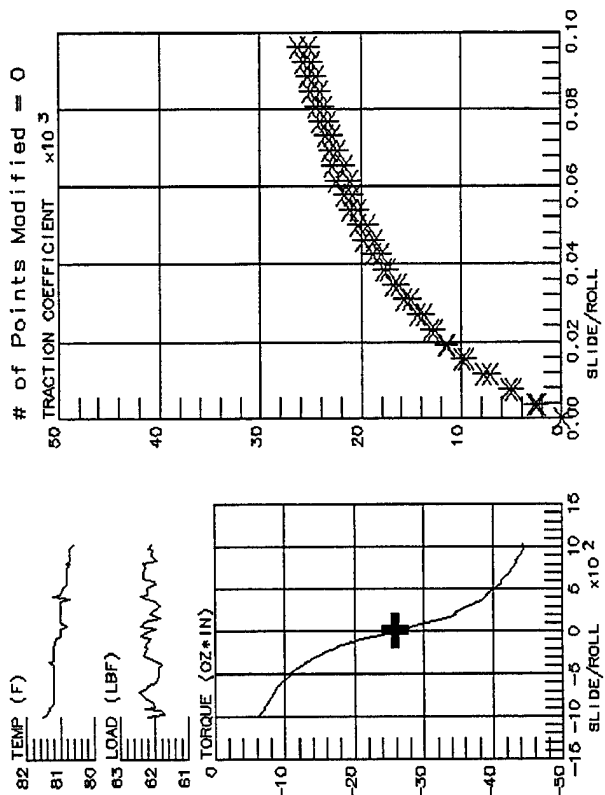
of Points Modified = 1



CP 90-715 ~300 Hatcol 3110
80F 62LBF 2603RPM 4 FILE: cp80m

#22

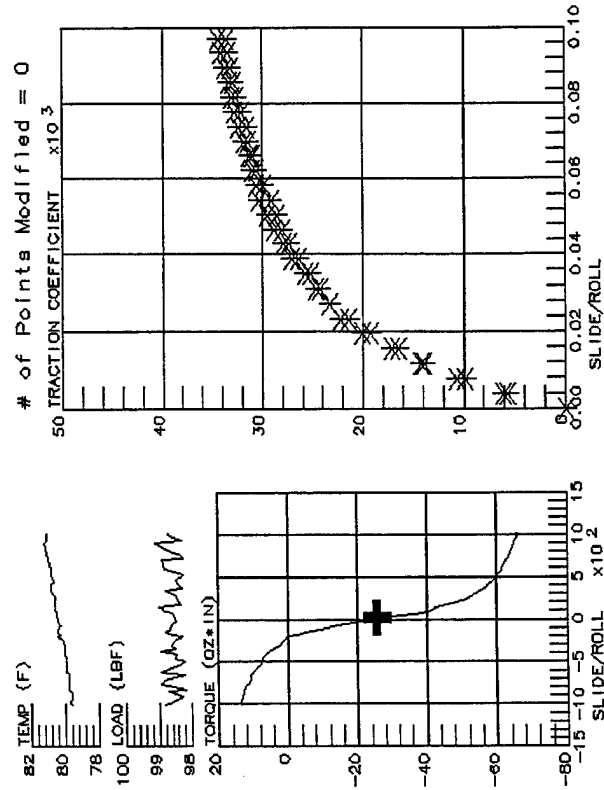
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
80F 99LBF 2603RPM 5 FILE: cp80m

#23

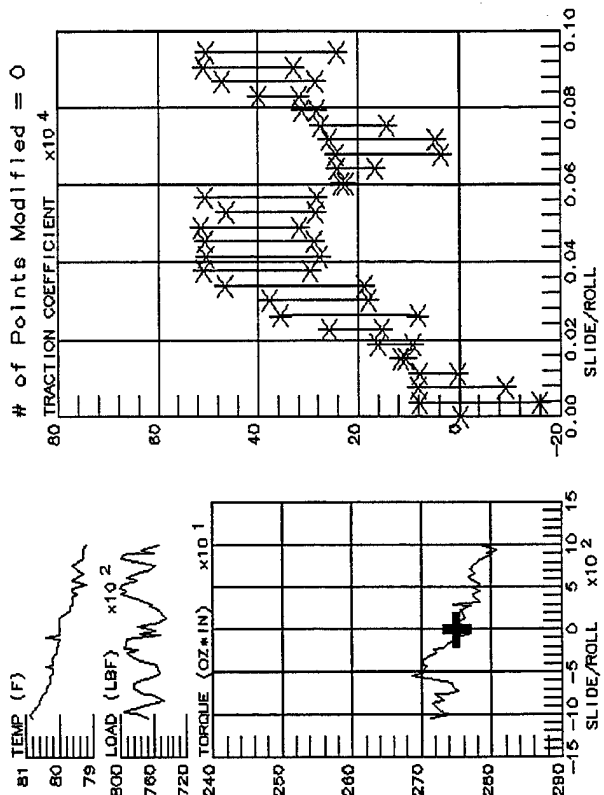
of Points Modified = 0



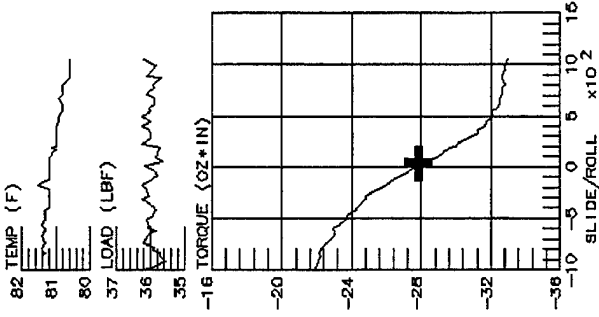
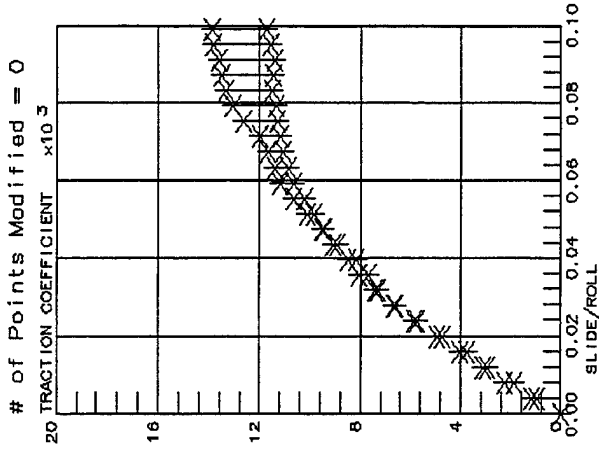
CP 90-715 ~300 Hatcol 3110
80F 8LBF 5165RPM 6 FILE: cp80m

#24

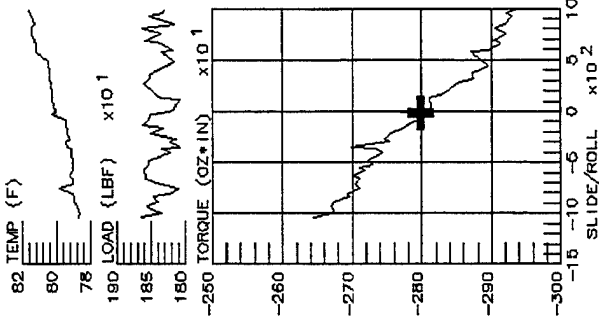
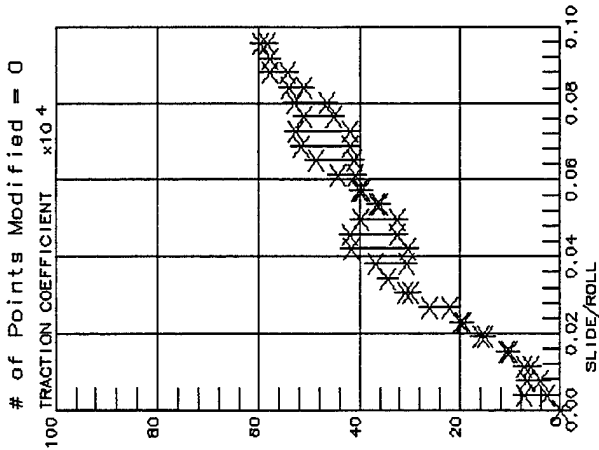
of Points Modified = 0



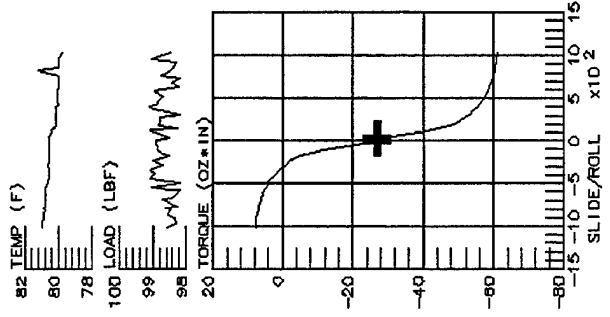
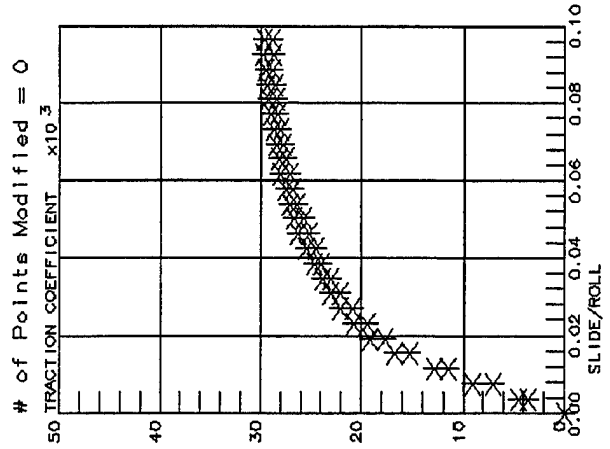
CP 90-715 ~300 Hatcol 3110 #26
80F 36LBF 5165RPM 8 FILE: cp80m



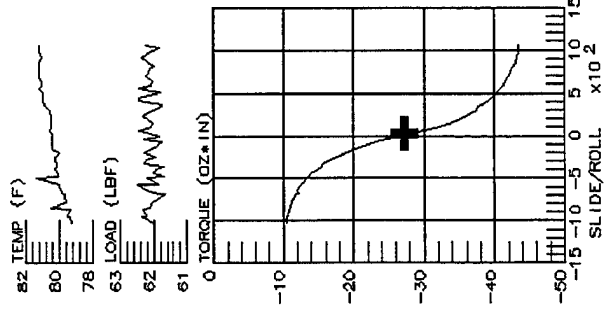
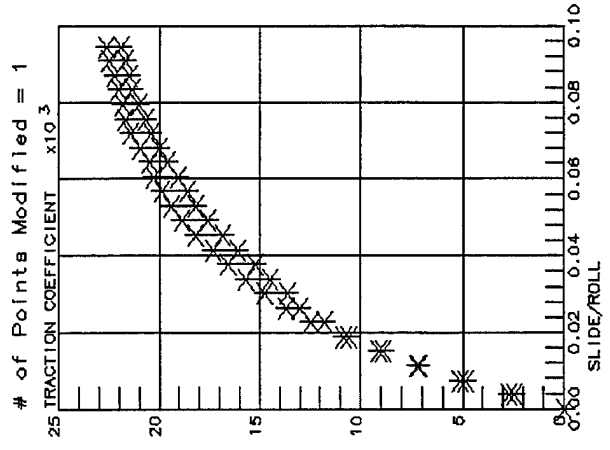
CP 90-715 ~300 Hatcol 3110 #25
80F 18LBF 5165RPM 7 FILE: cp80m



CP 90-715 ~300 Hatcol 3110 #28
80F 99LBF 5165RPM 10 FILE: cp80m

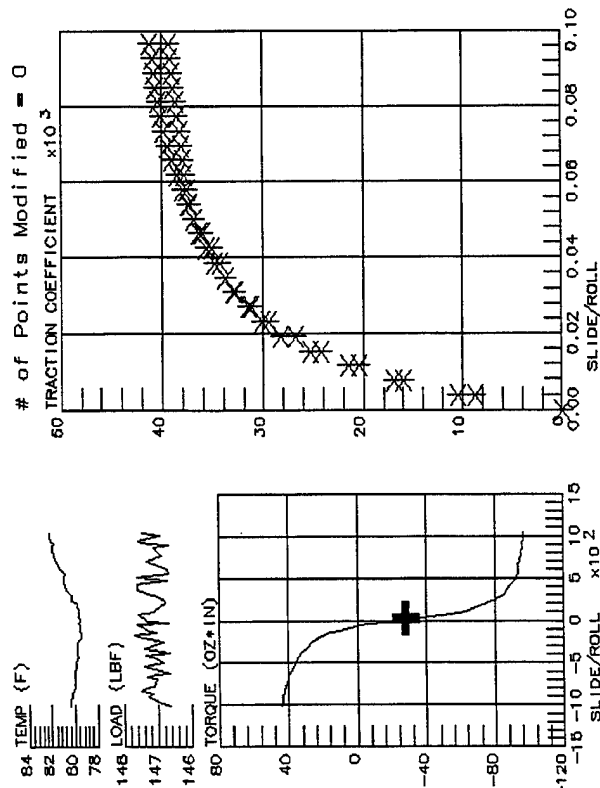


CP 90-715 ~300 Hatcol 3110 #27
80F 62LBF 5165RPM 9 FILE: cp80m



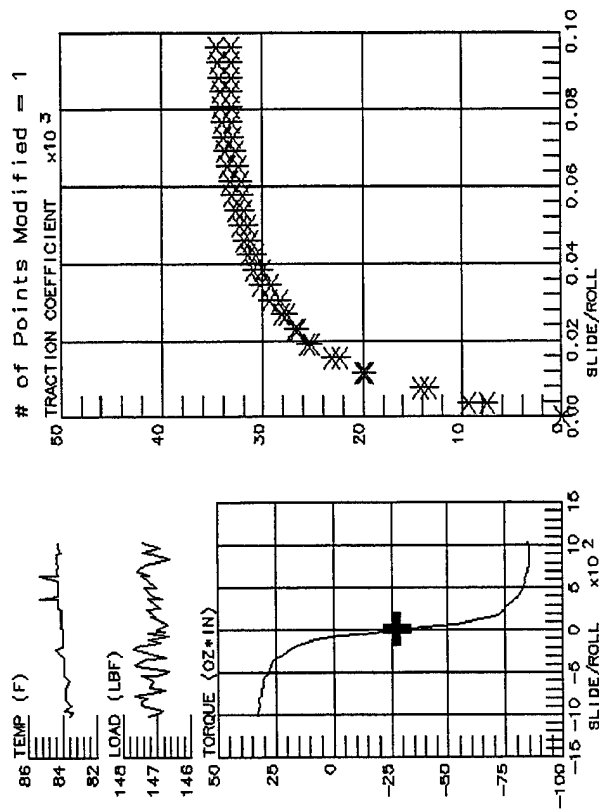
CP 90-715 ~300 Hatcol 3110 #29
80F 147LBF 2603RPM 1 FILE: cp80mx

of Points Modified = 0



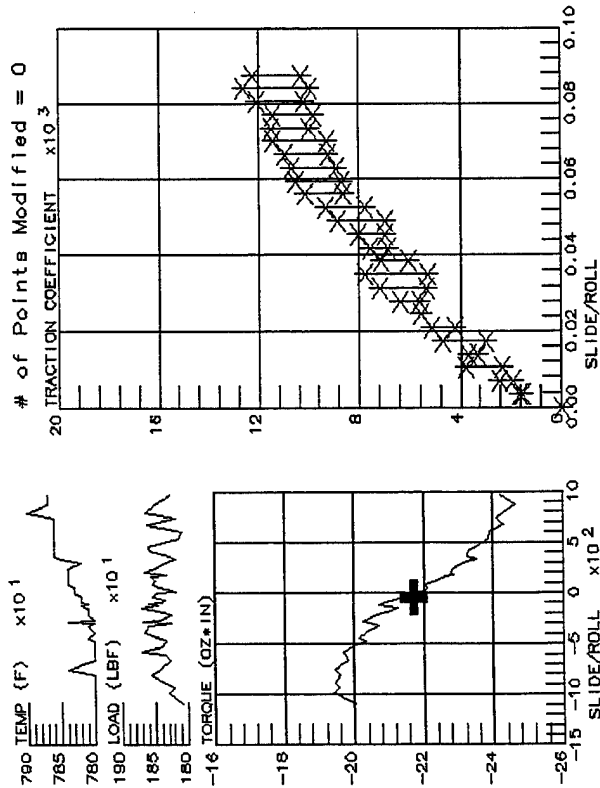
CP 90-715 ~300 Hatcol 3110 #30
80F 147LBF 5165RPM 2 FILE: cp80mx

of Points Modified = 1



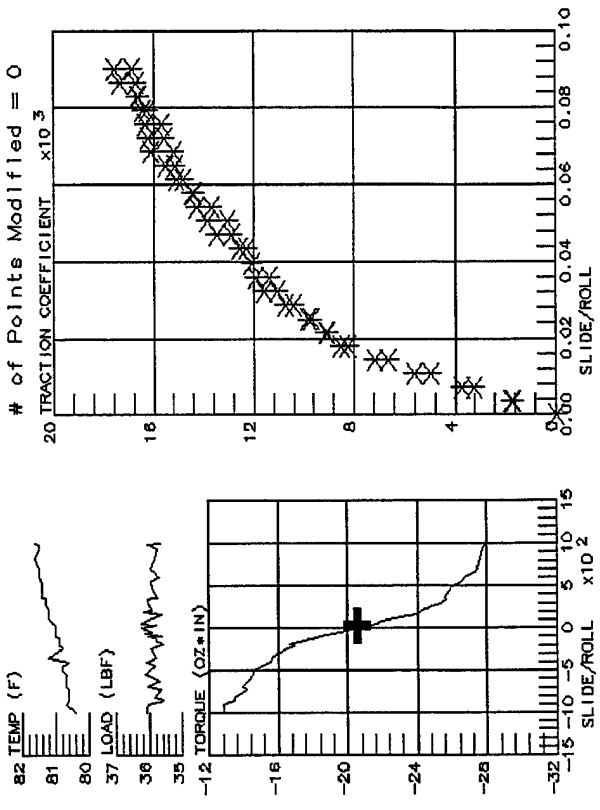
CP 90-715 ~300 Hatcol 3110 #31
80F 181LBF 7770RPM 1 FILE: cp80h

of Points Modified = 0

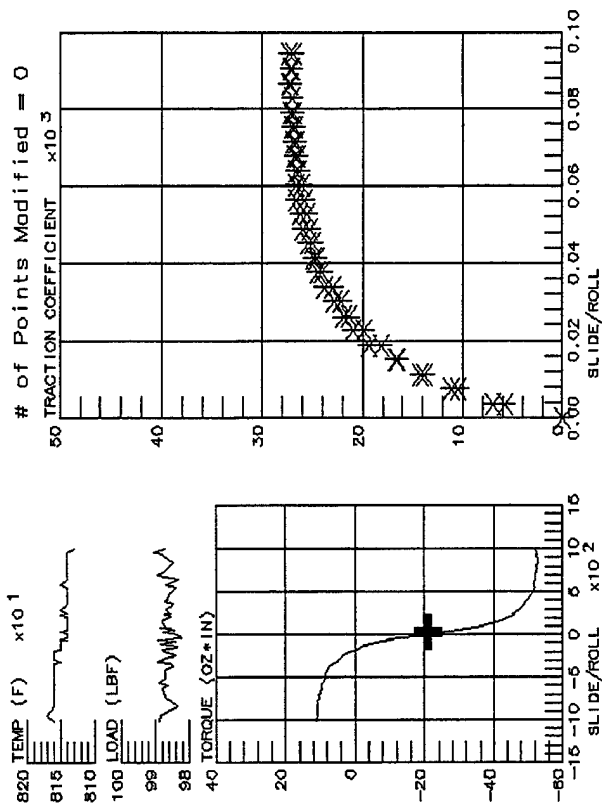
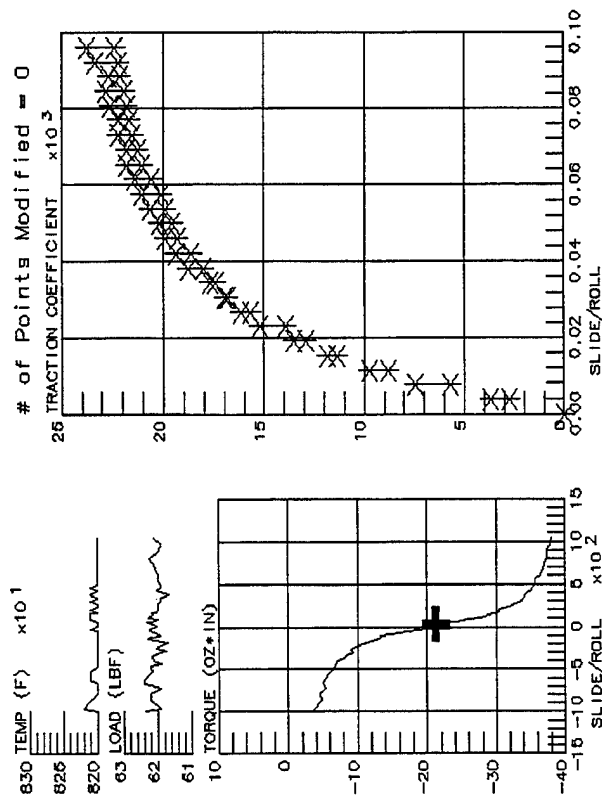


CP 90-715 ~300 Hatcol 3110 #32
80F 36LBF 7770RPM 2 FILE: cp80h

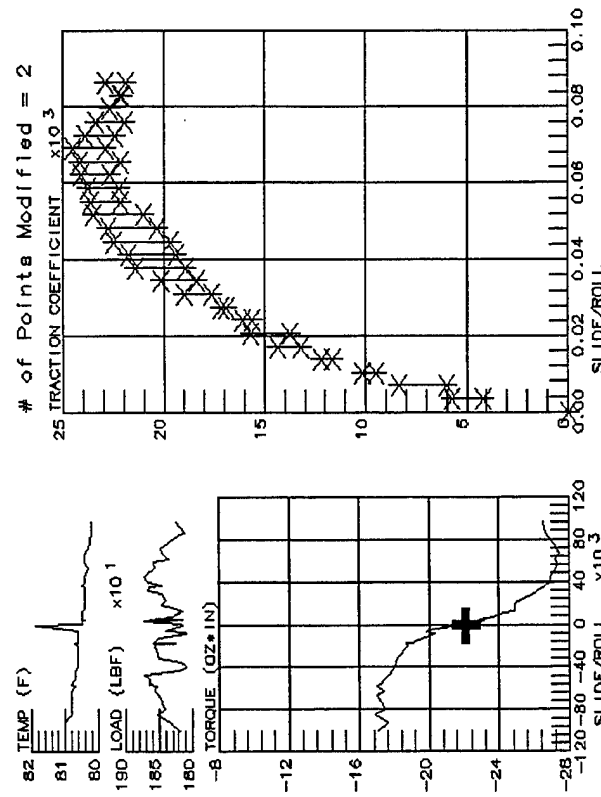
of Points Modified = 0



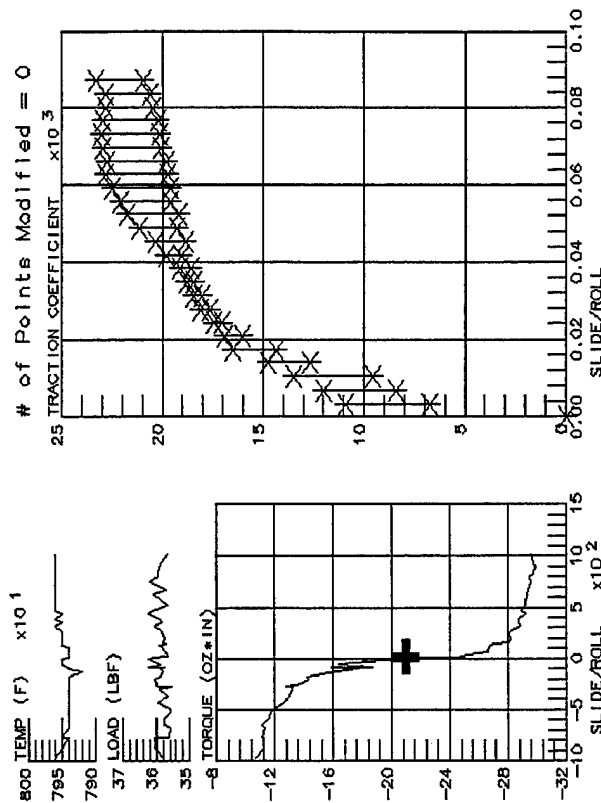
CP 90-715 ~300 Hatcol 3110 #33
80F 62LBF 7770RPM 3 FILE: cp80h



CP 90-715 ~300 Hatcol 3110 #35
80F 18LBF 10370RPM 5 FILE: cp80h



CP 90-715 ~300 Hatcol 3110 #36
80F 36LBF 10370RPM 6 FILE: cp80h

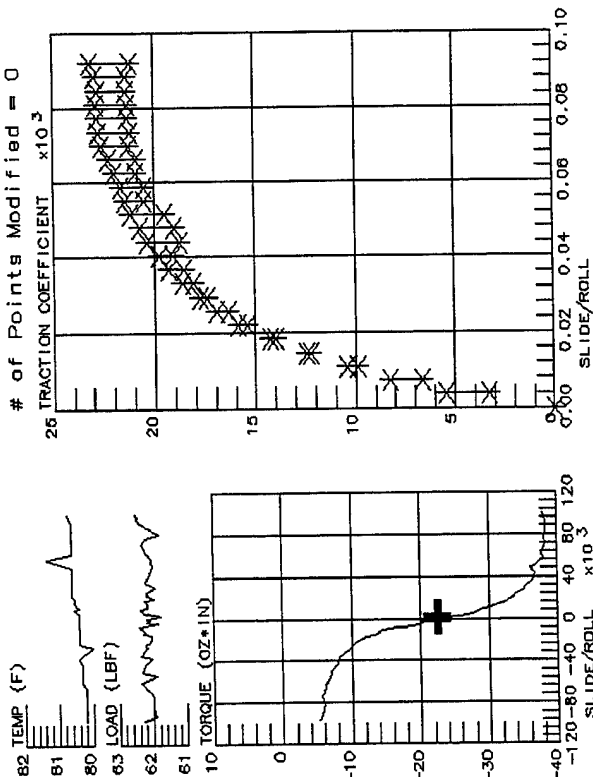


CP 90-715 ~300 Hatcol 3110
80F 99LBF 10370RPM 8 FILE: cp80h

#37

CP 90-715 ~300 Hatcol 3110
80F 62LBF 10370RPM 7 FILE: cp80h

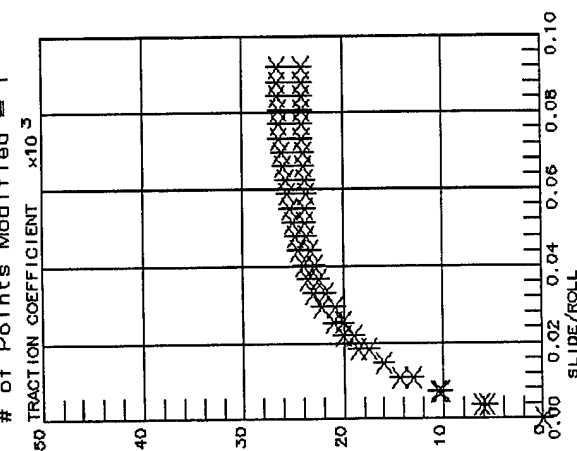
of Points Modified = 0



#38

CP 90-715 ~300 Hatcol 3110
80F 99LBF 10370RPM 8 FILE: cp80h

of Points Modified = 1

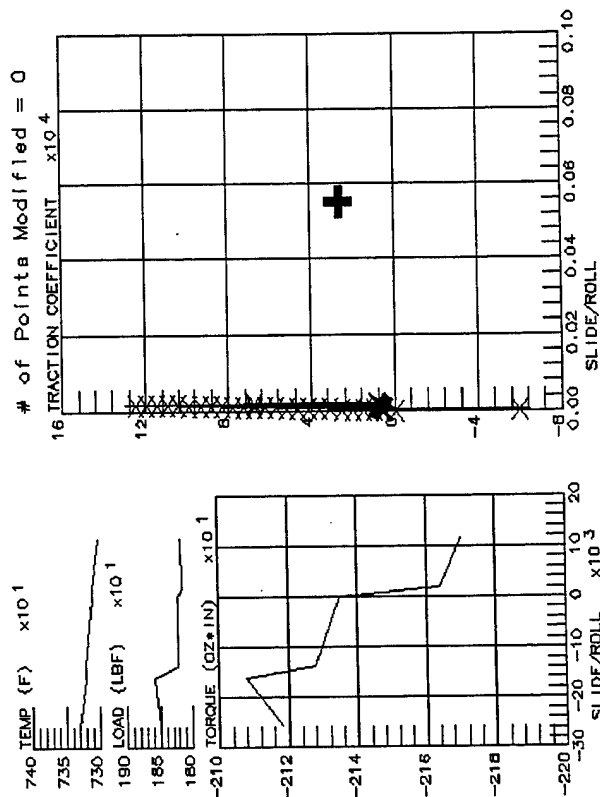


CP 90-715 ~300 Hatcol 3110
80F 36LBF 7770RPM 2 FILE: cp80hxx

#39

CP 90-715 ~300 Hatcol 3110
80F 18LBF 7770RPM 1 FILE: cp80hxx

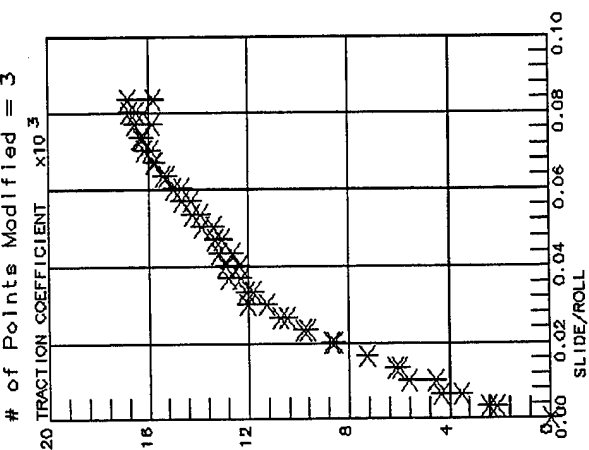
of Points Modified = 0



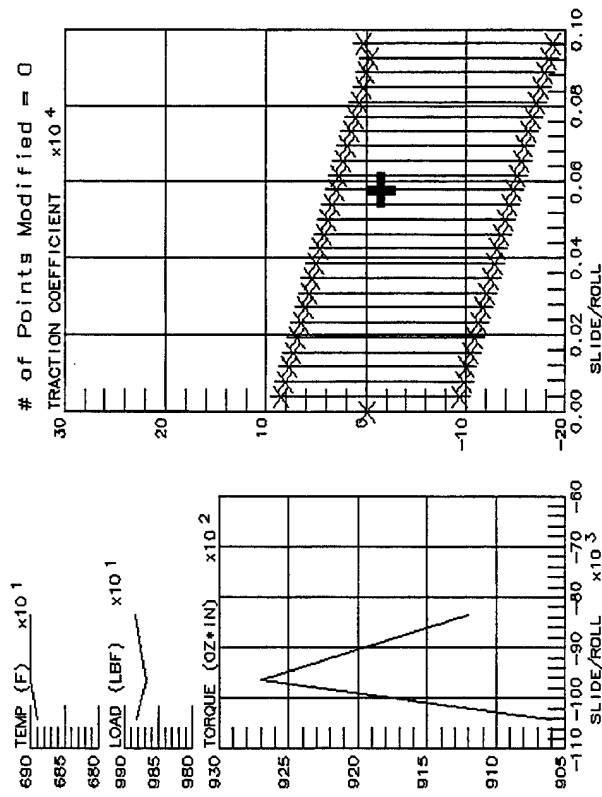
#40

CP 90-715 ~300 Hatcol 3110
80F 36LBF 7770RPM 2 FILE: cp80hxx

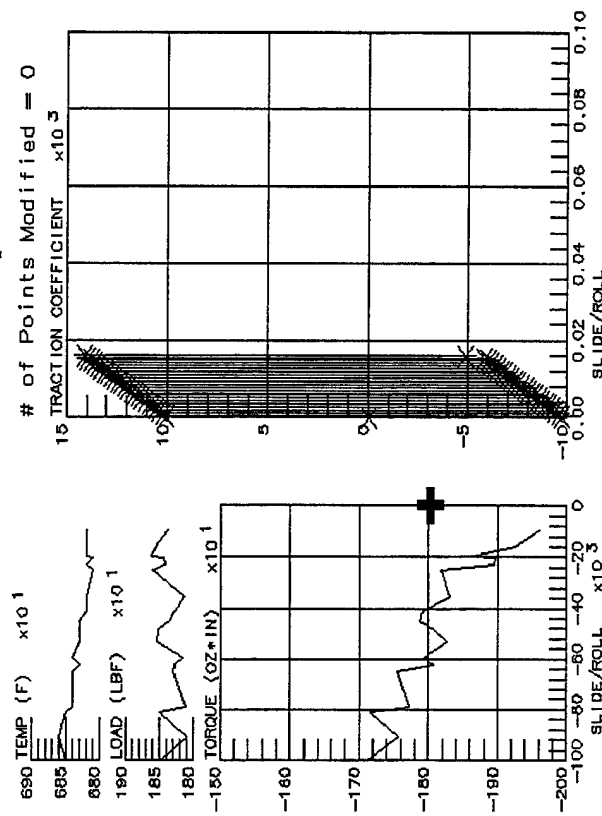
of Points Modified = 3



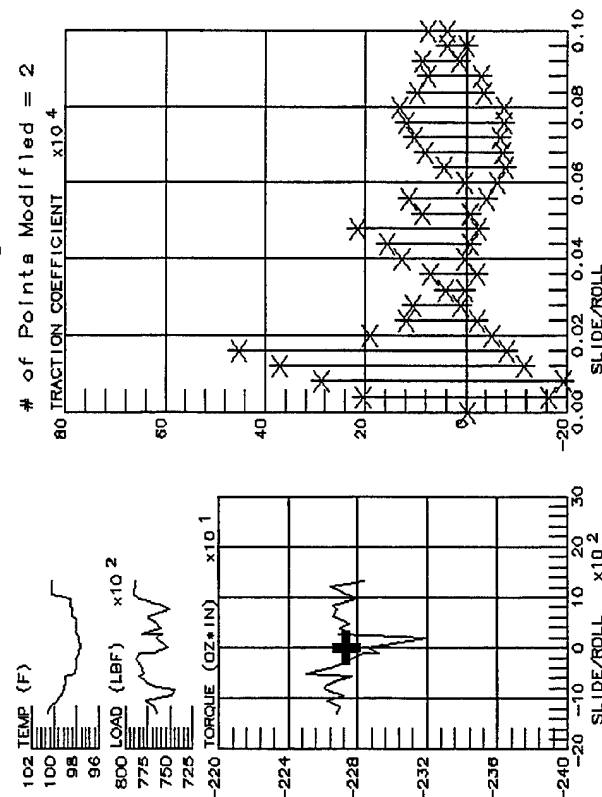
CP 90-715 ~300 Hatcol 3110 #41
80F 62LBF 7770RPM 3 FILE: cp80hxx



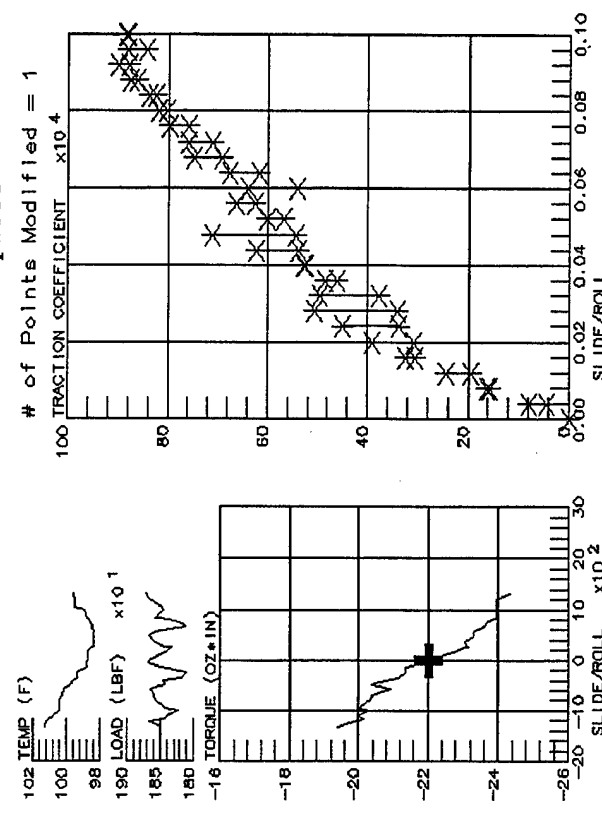
CP 90-715 ~300 Hatcol 3110 #42
80F 18LBF 10370RPM 5 FILE: cp80hxx



CP 90-715 ~300 Hatcol 3110 #43
100F 8LBF 310RPM 1 FILE: cp1001

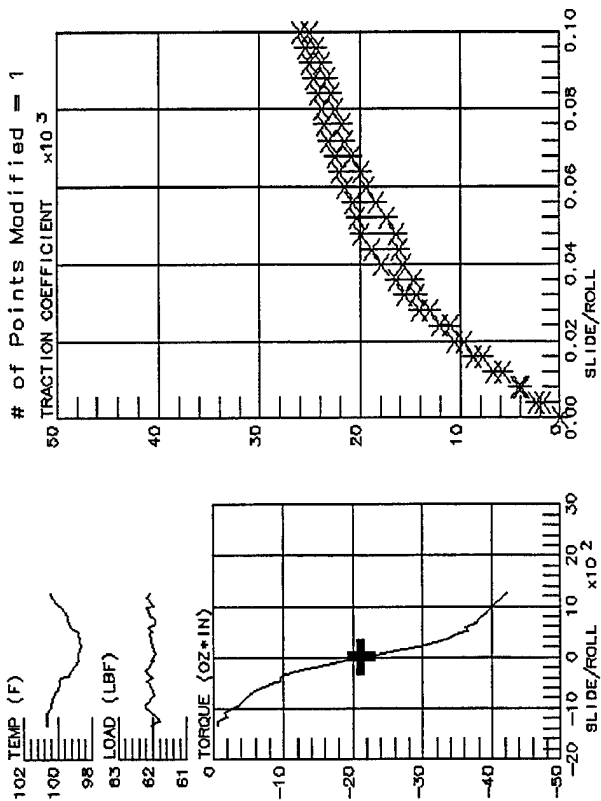
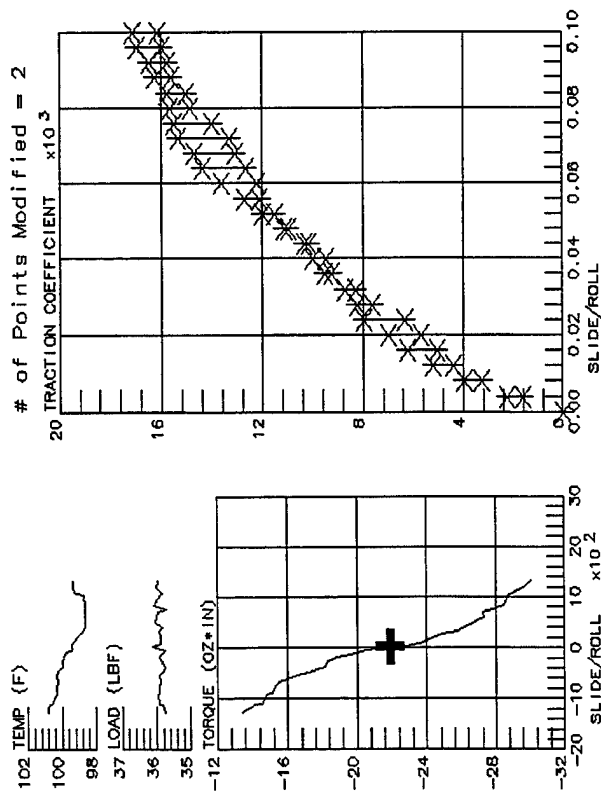


CP 90-715 ~300 Hatcol 3110 #44
100F 18LBF 310RPM 2 FILE: cp1001



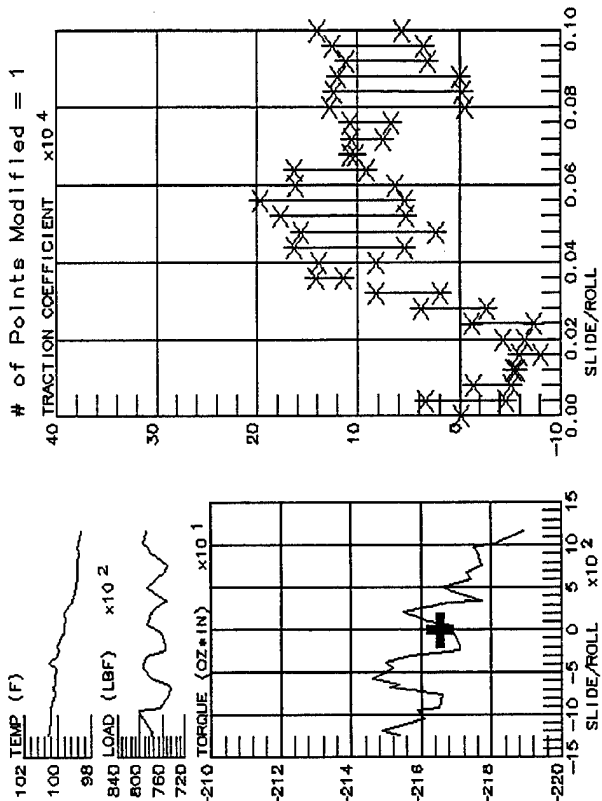
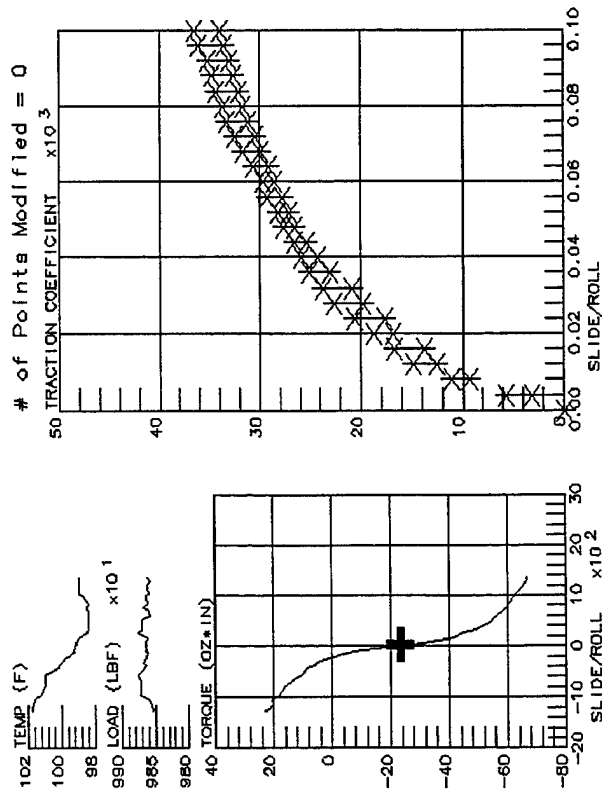
CP 90-715 ~300 Hatcol 3110
100F 36LBF 310RPM 3 FILE: cp1001

#45
of Points Modified = 2

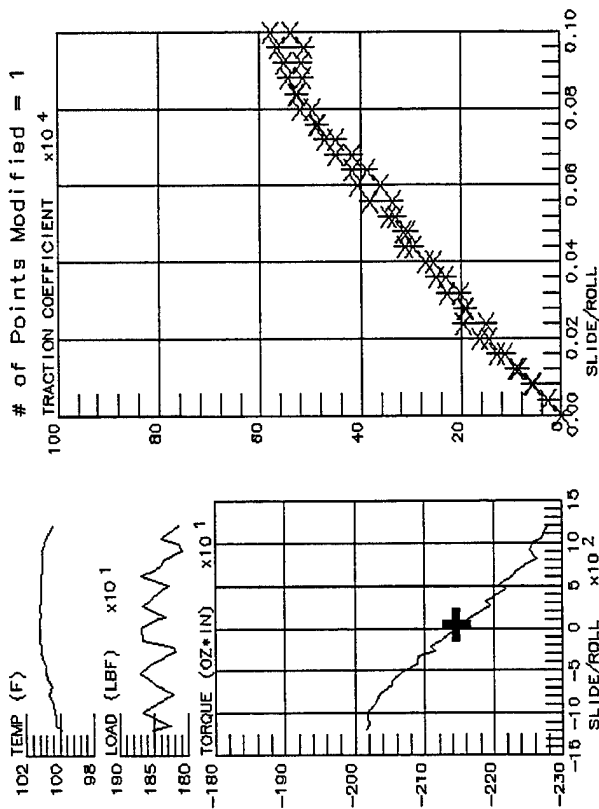


CP 90-715 ~300 Hatcol 3110
100F 99LBF 310RPM 5 FILE: cp1001

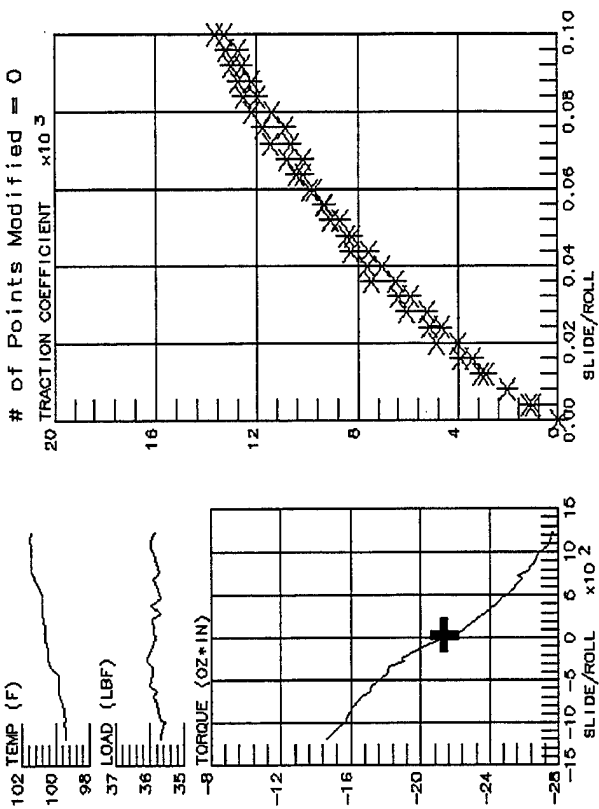
#47
of Points Modified = 0



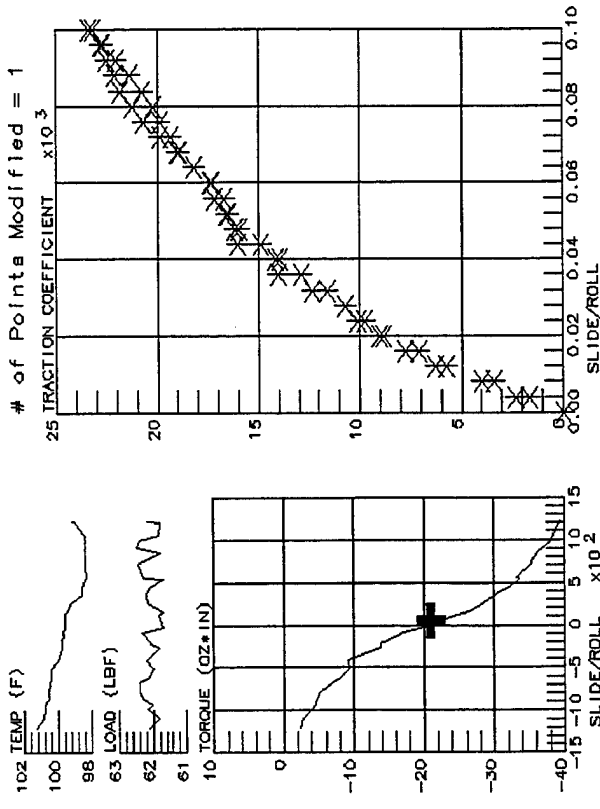
CP 90-715 ~300 Hatcol 3110 #49
100F 18LBF 660RPM 7 FILE: cp1001
of Points Modified = 1



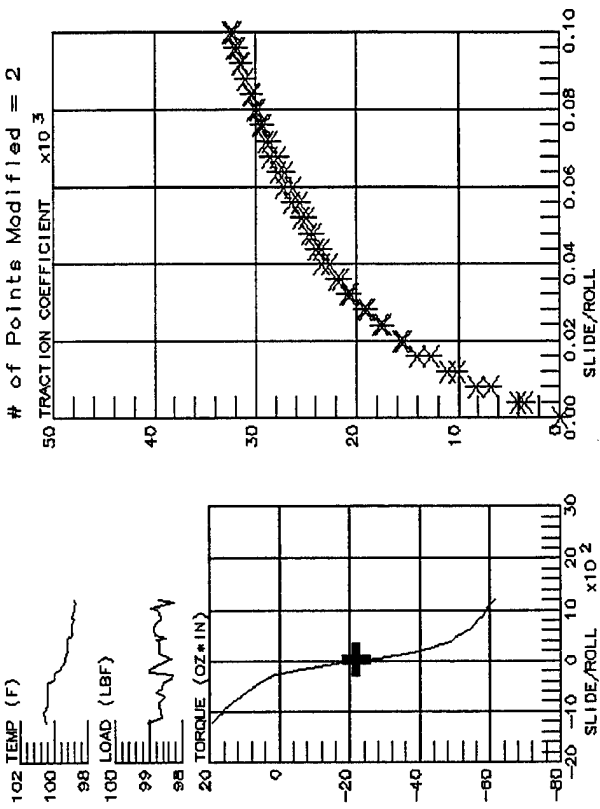
CP 90-715 ~300 Hatcol 3110 #50
100F 36LBF 660RPM 8 FILE: cp1001
of Points Modified = 0



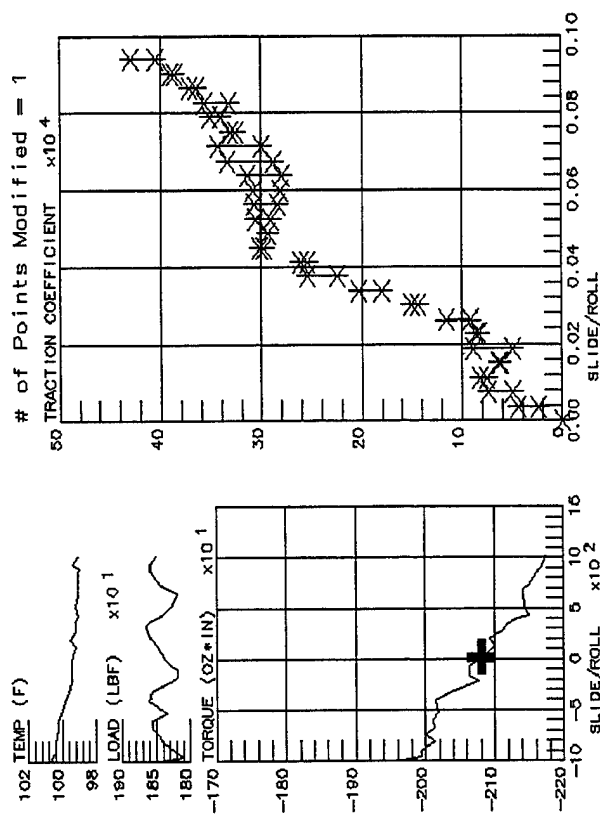
CP 90-715 ~300 Hatcol 3110 #51
100F 62LBF 660RPM 9 FILE: cp1001
of Points Modified = 1



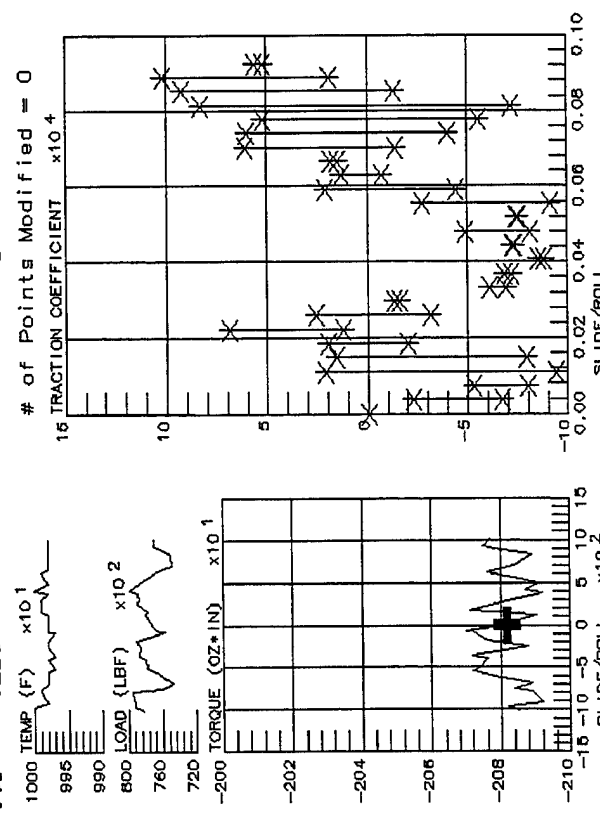
CP 90-715 ~300 Hatcol 3110 #52
100F 99LBF 660RPM 10 FILE: cp1001
of Points Modified = 2



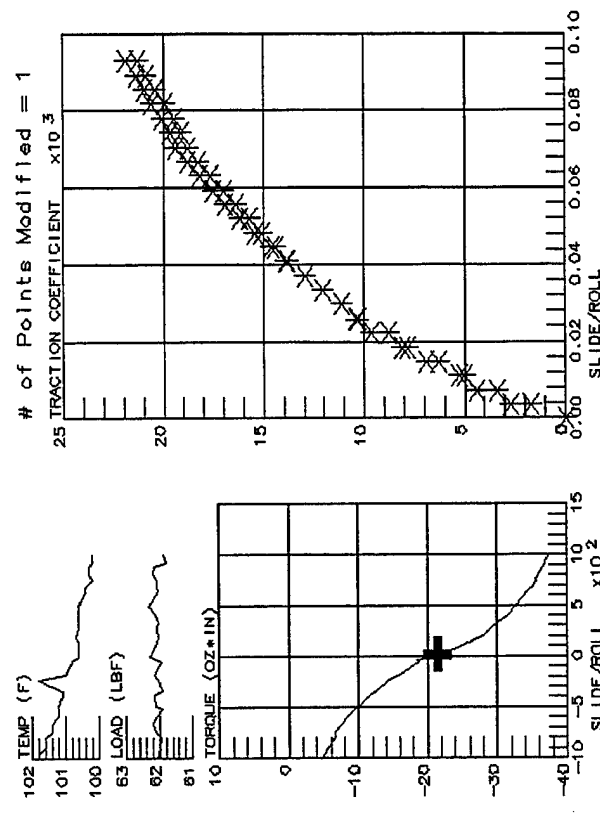
CP 90-715 ~300 Hatcol 3110 #54
100F 18LBF 1280RPM 12 FILE: op1001



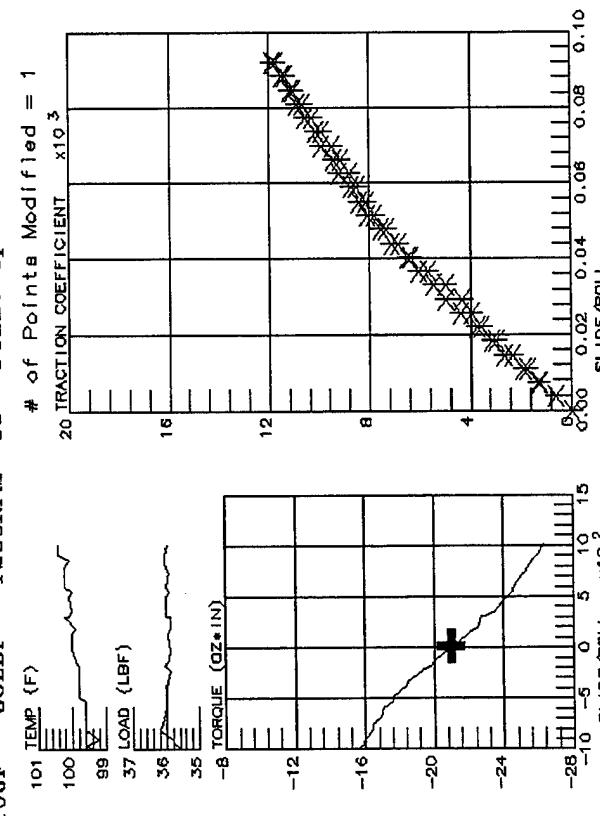
CP 90-715 ~300 Hatcol 3110 #53
100F 8LBF 1280RPM 11 FILE: op1001



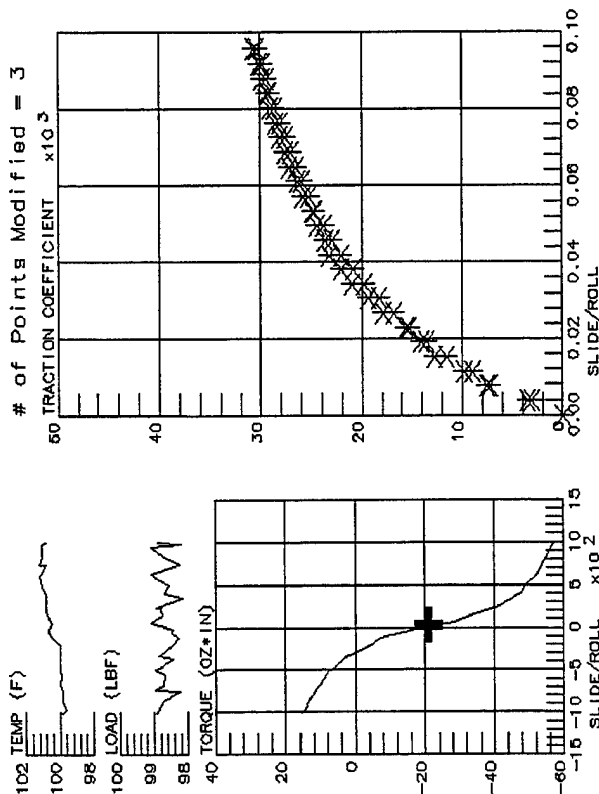
CP 90-715 ~300 Hatcol 3110 #56
100F 62LBF 1280RPM 14 FILE: cp1001



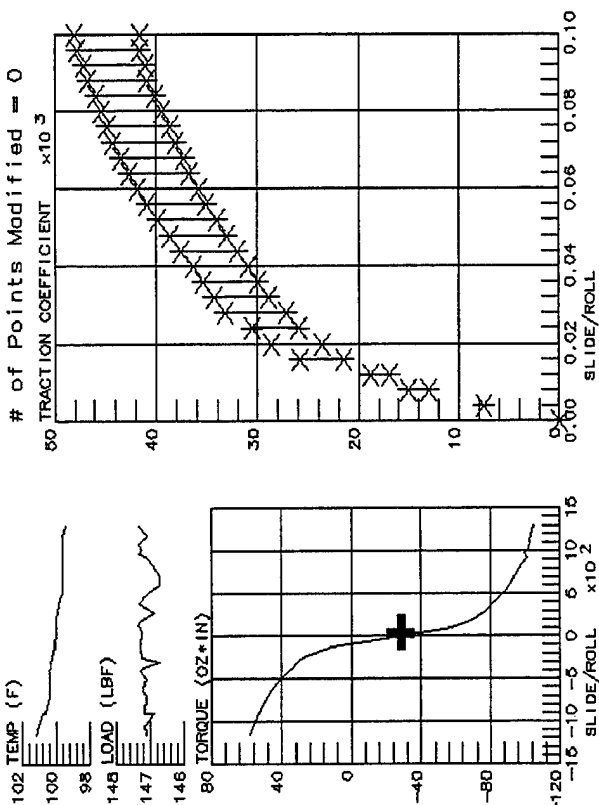
CP 90-715 ~300 Hatcol 3110 #55
100F 36LBF 1280RPM 13 FILE: cp1001



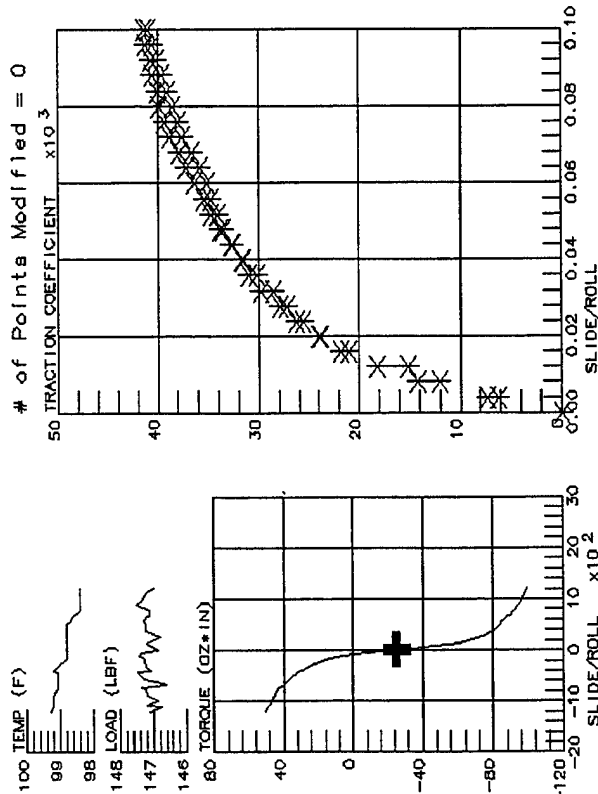
CP 90-715 ~300 Hatcol 3110 #57
100F 99LBF 1280RPM 16 FILE: cp1001



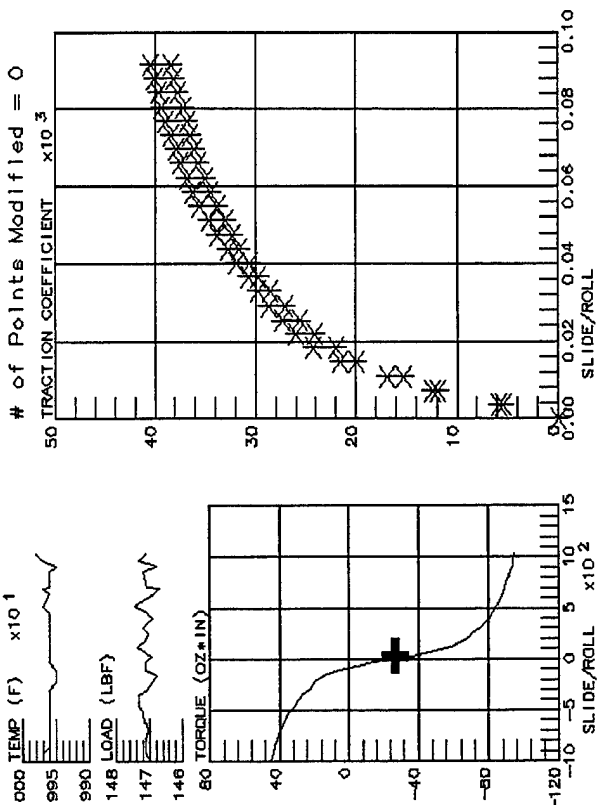
CP 90-715 ~300 Hatcol 3110 #58
100F 147LBF 310RPM 1 FILE: cp1001x



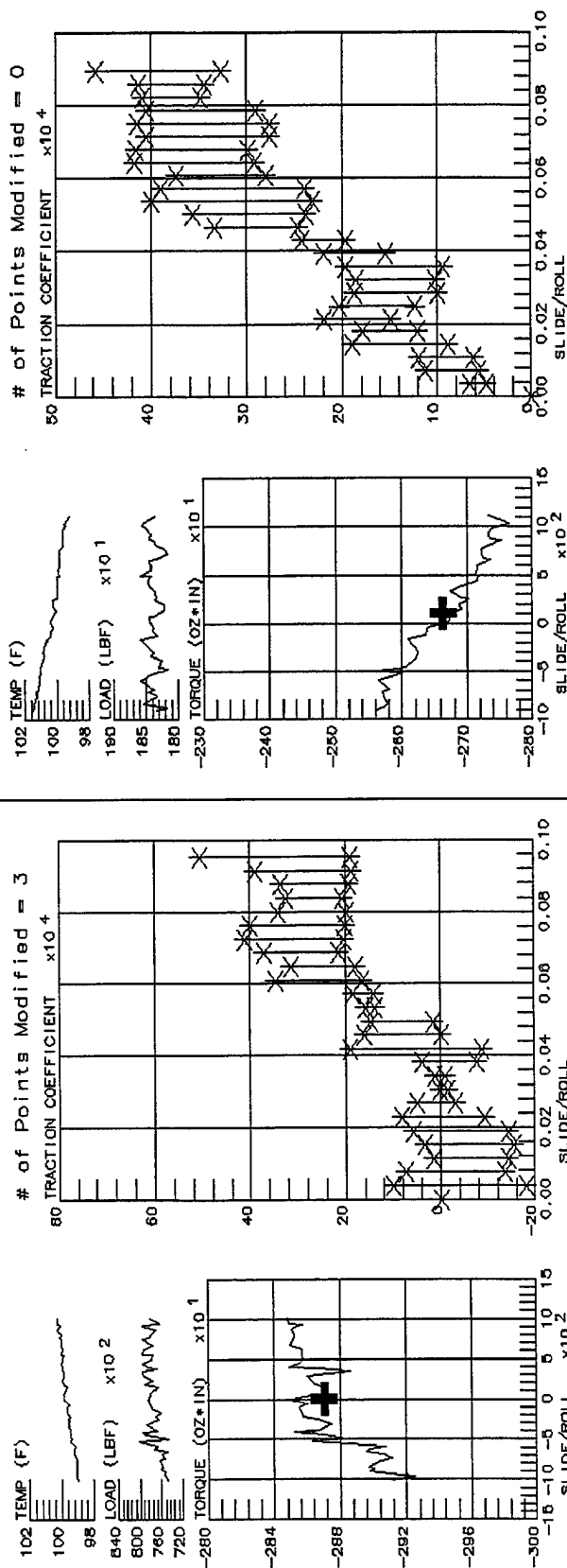
CP 90-715 ~300 Hatcol 3110 #59
100F 147LBF 660RPM 2 FILE: cp1001x



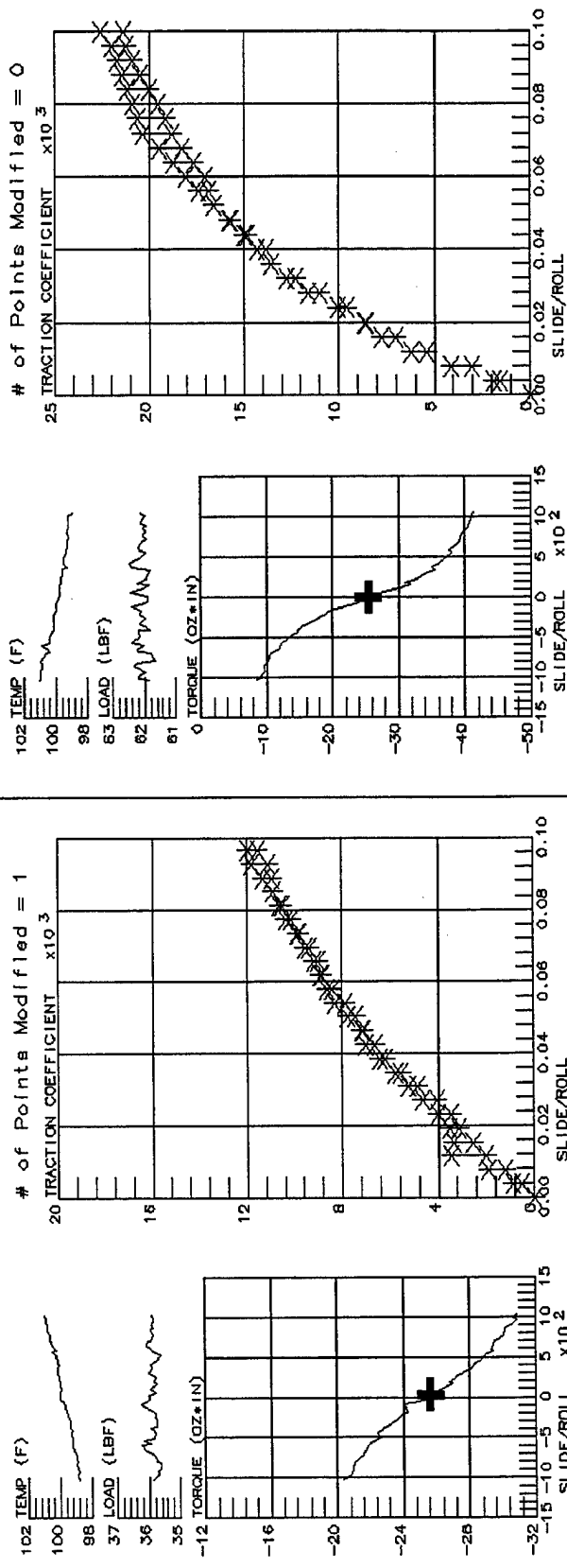
CP 90-715 ~300 Hatcol 3110 #80
100F 147LBF 1280RPM 3 FILE: cp1001x



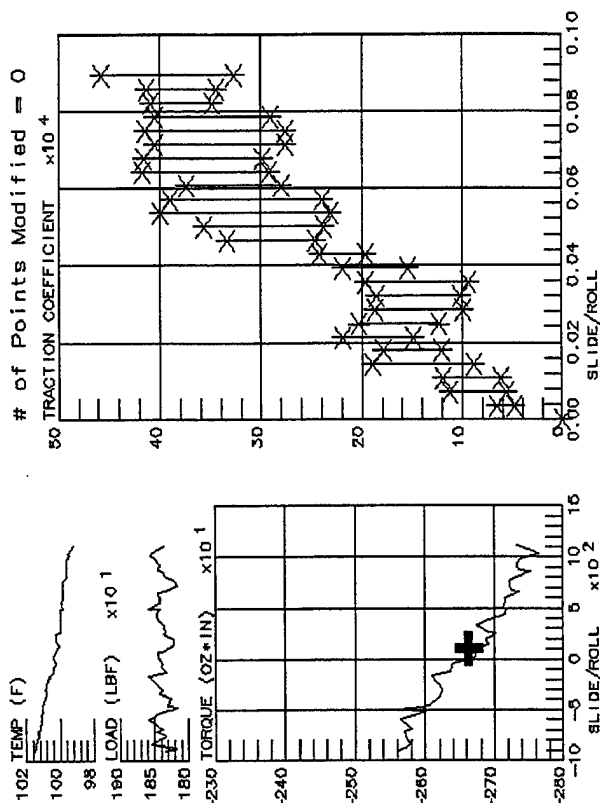
CP 90-715 ~300 Hatool 3110 #61
100F 8LBF 2603RPM 1 FILE: cp100m



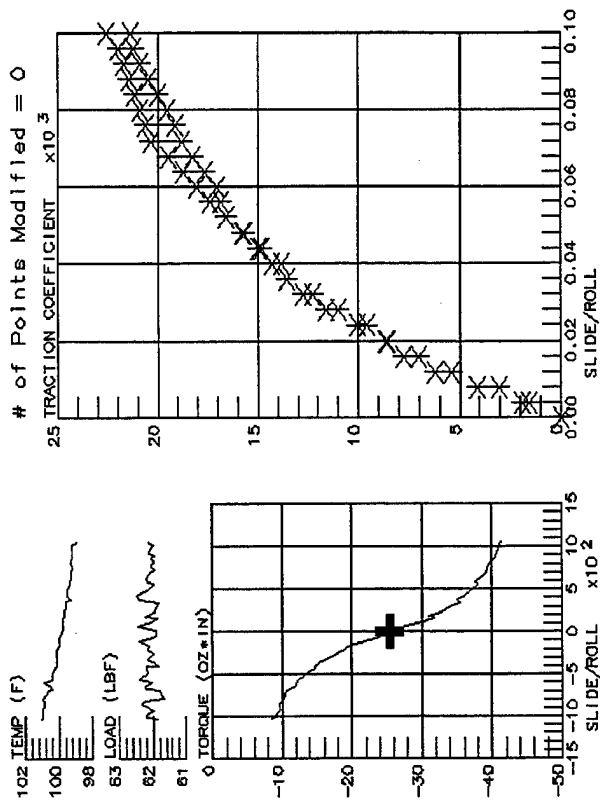
CP 90-715 ~300 Hatool 3110 #63
100F 36LBF 2603RPM 3 FILE: cp100m



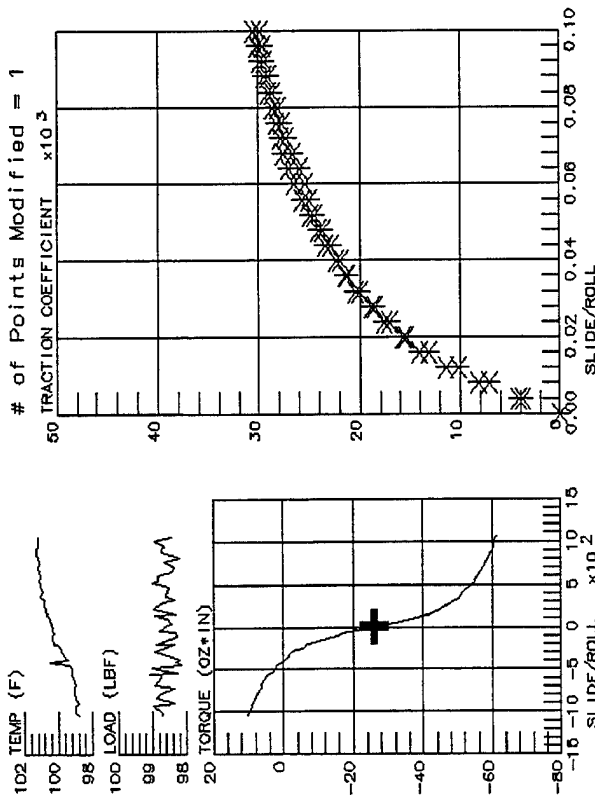
CP 90-715 ~300 Hatool 3110 #62
100F 18LBF 2603RPM 2 FILE: cp100m



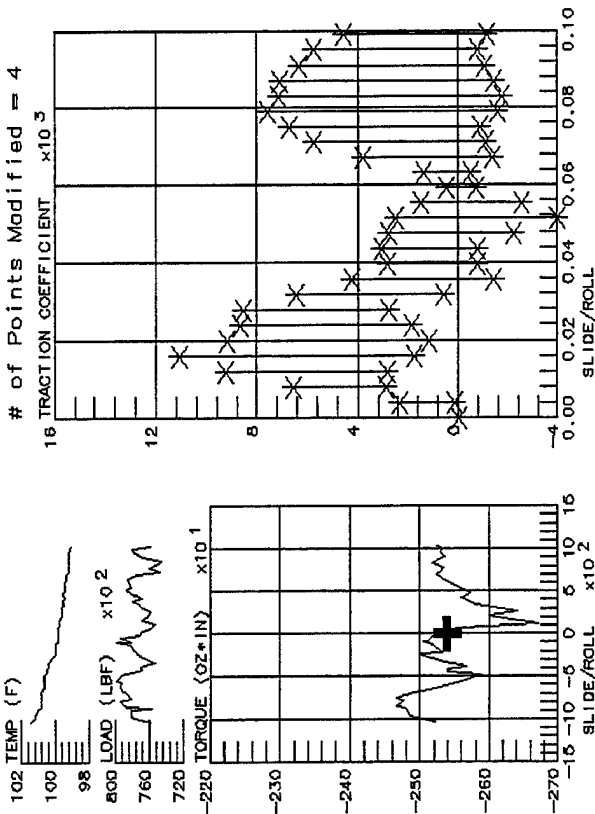
CP 90-715 ~300 Hatool 3110 #64
100F 62LBF 2603RPM 4 FILE: cp100m



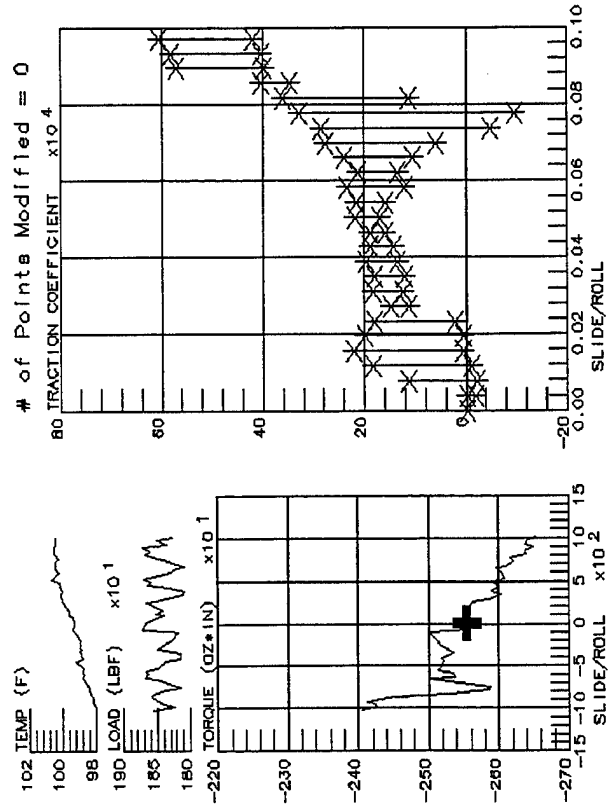
CP 90-715 ~300 Hatcol 3110 #65
100F 99LBF 2603RPM 5 FILE: cp100m



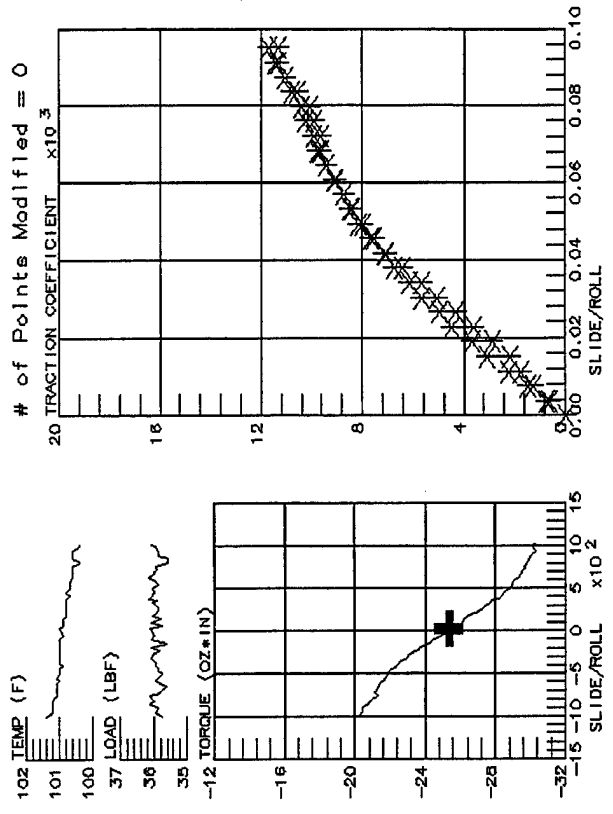
CP 90-715 ~300 Hatcol 3110 #66
100F 8LBF 5165RPM 8 FILE: cp100m



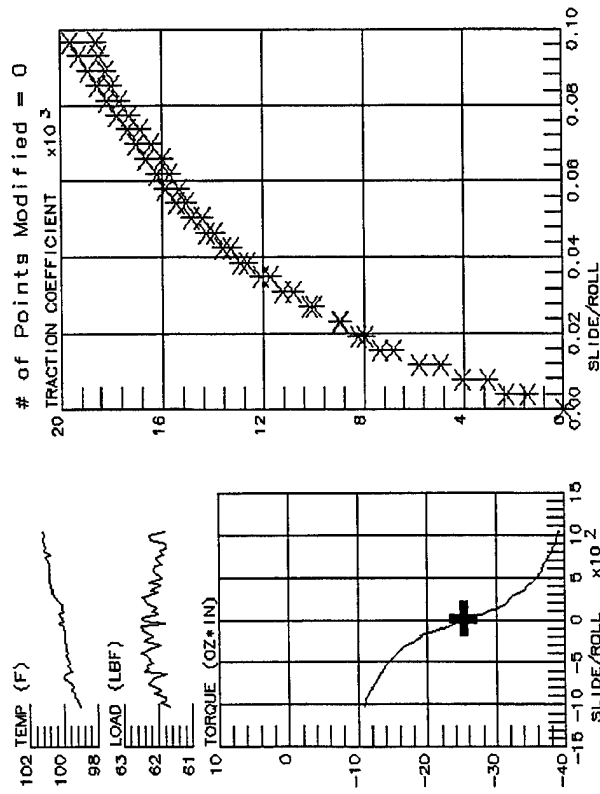
CP 90-715 ~300 Hatcol 3110 #67
100F 18LBF 5165RPM 7 FILE: cp100m



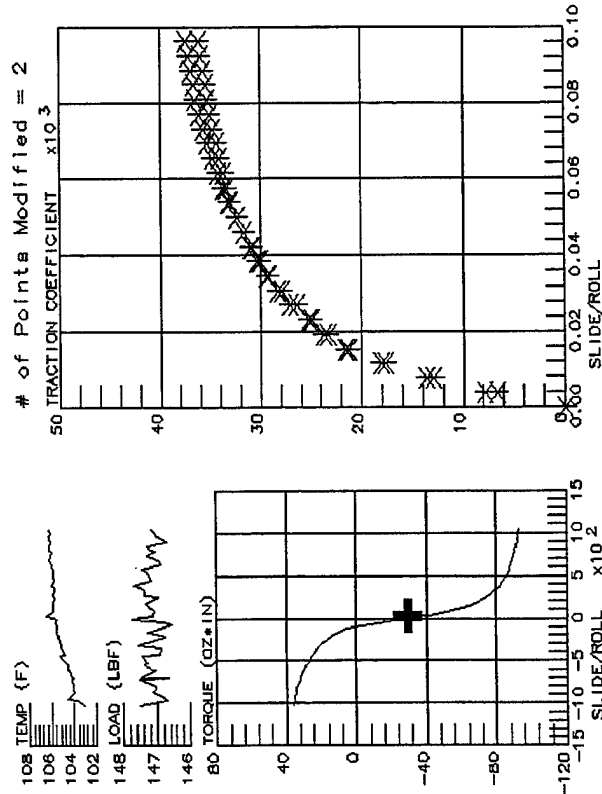
CP 90-715 ~300 Hatcol 3110 #68
100F 36LBF 5165RPM 8 FILE: cp100m



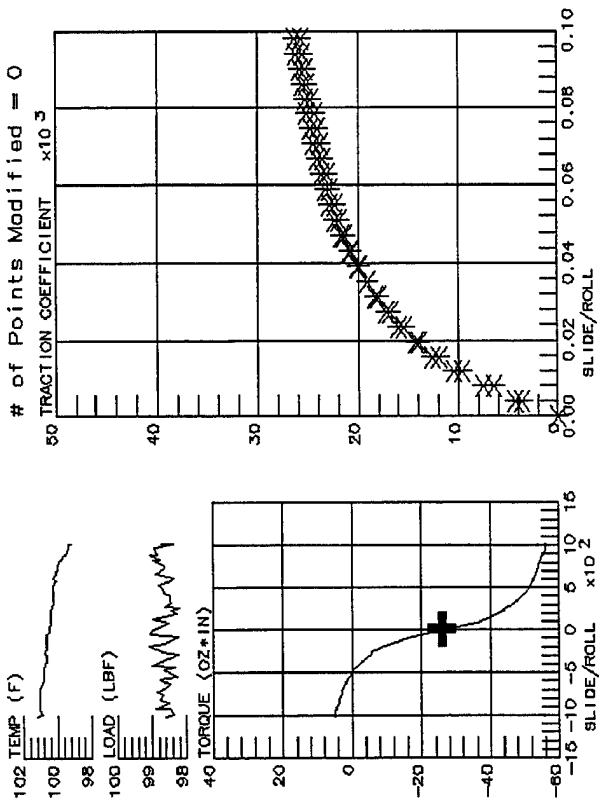
CP 90-715 ~300 Hatcol 3110 #69
100F 62LBF 5165RPM 9 FILE: cp100mx



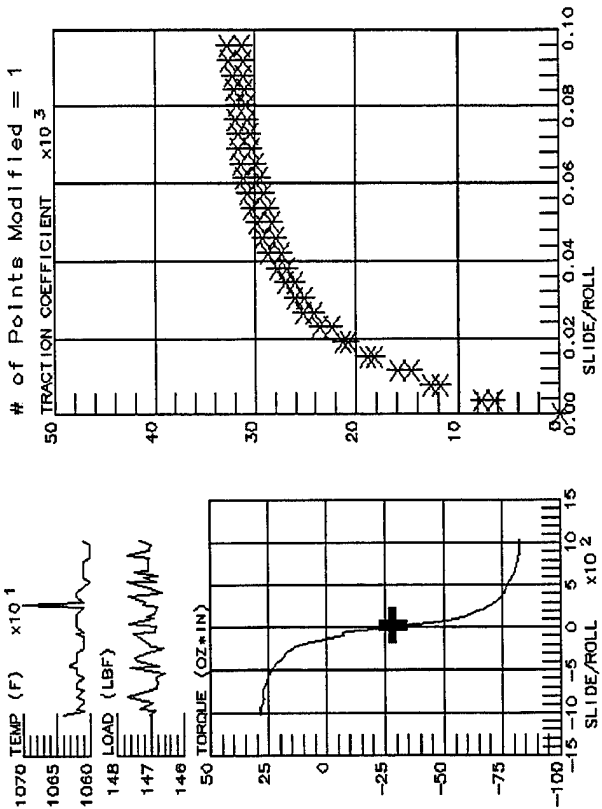
CP 90-715 ~300 Hatcol 3110 #71
100F 147LBF 2603RPM 1 FILE: cp100mx



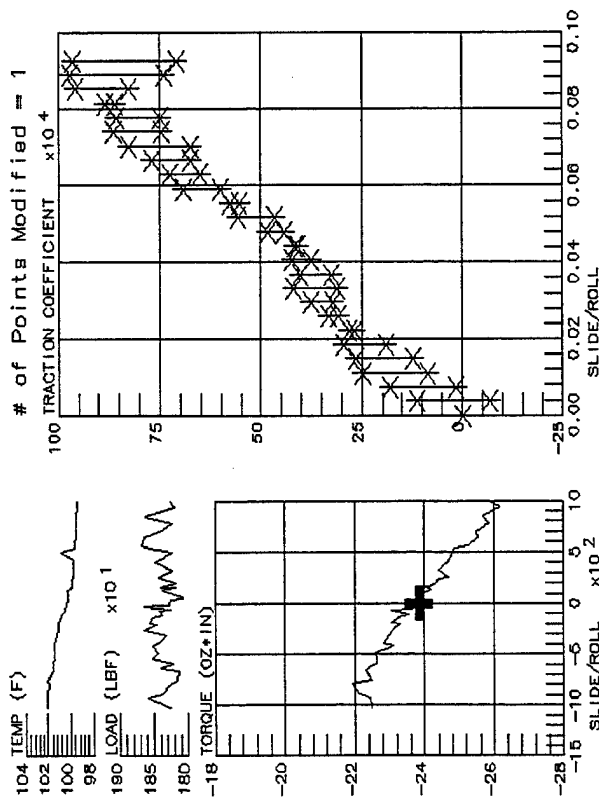
CP 90-715 ~300 Hatcol 3110 #70
100F 99LBF 5165RPM 10 FILE: cp100mx



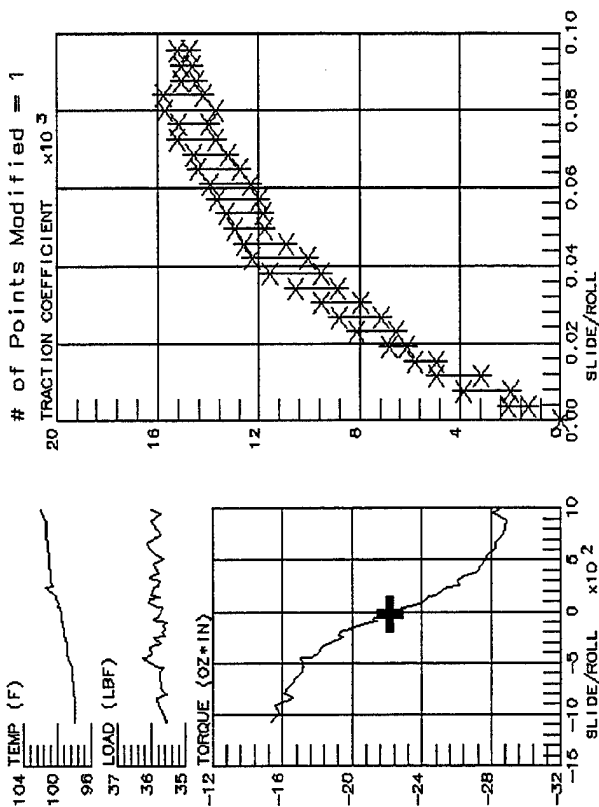
CP 90-715 ~300 Hatcol 3110 #72
100F 147LBF 5165RPM 2 FILE: cp100mx



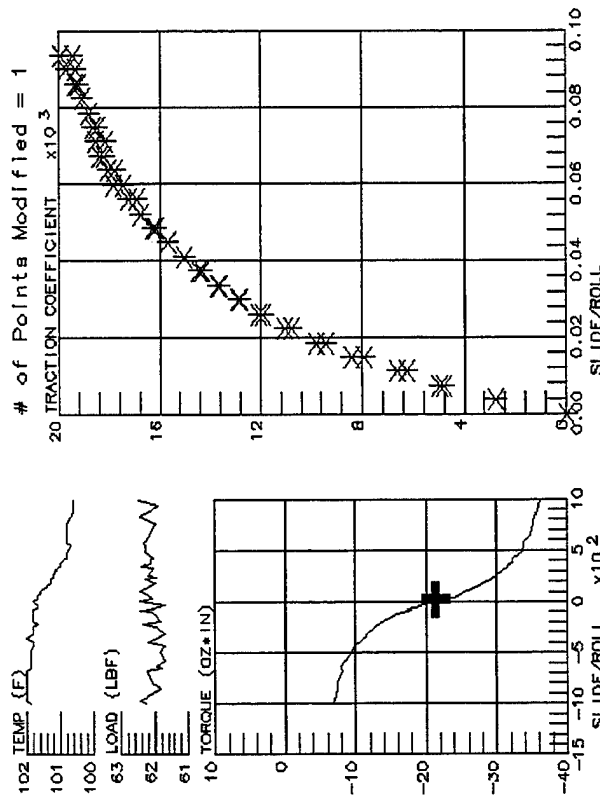
CP 90-715 ~300 Hatcol 3110 #73
100F 18LBF 7770RPM 1 FILE: cp100h



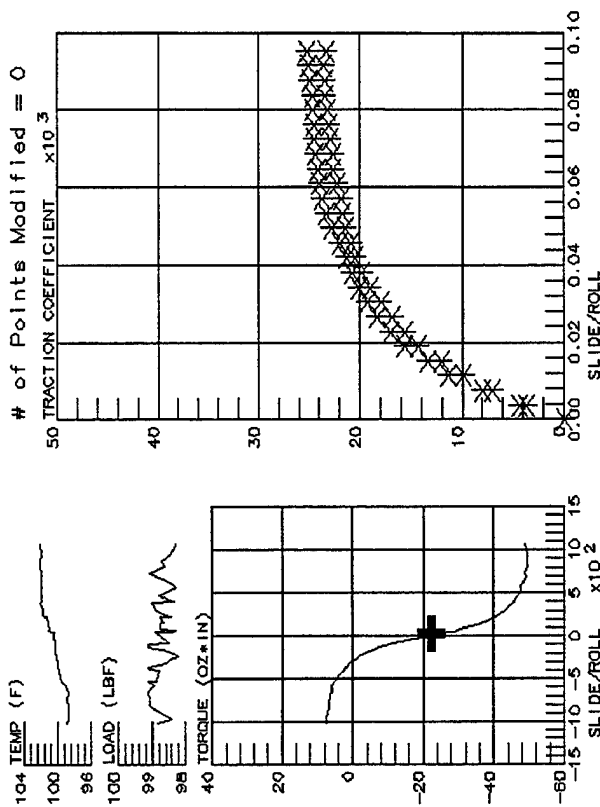
CP 90-715 ~300 Hatcol 3110 #74
100F 36LBF 7770RPM 2 FILE: cp100h



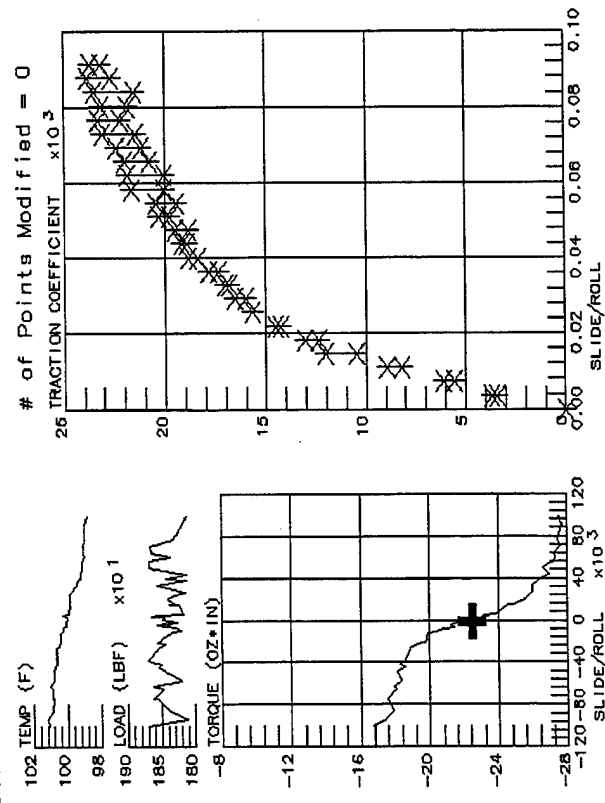
CP 90-715 ~300 Hatcol 3110 #75
100F 62LBF 7770RPM 3 FILE: cp100h



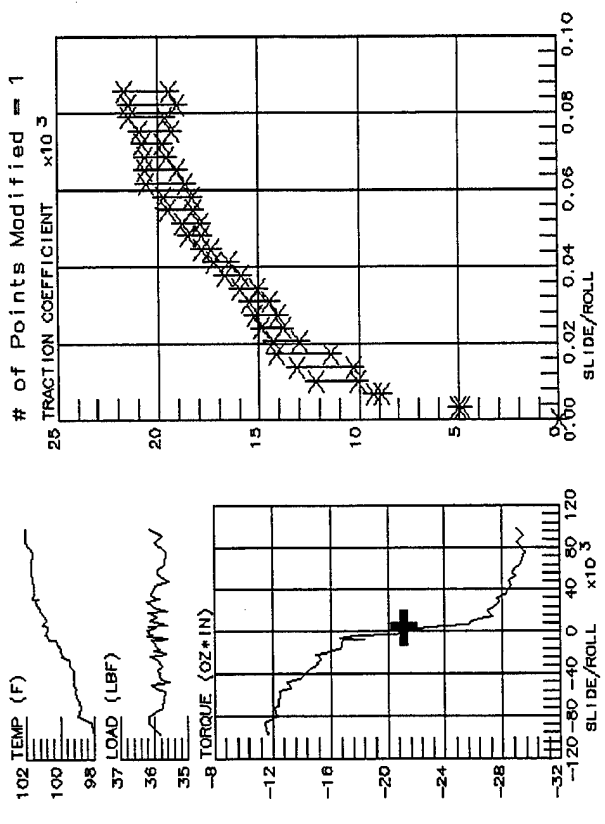
CP 90-715 ~300 Hatcol 3110 #76
100F 99LBF 7770RPM 4 FILE: cp100h



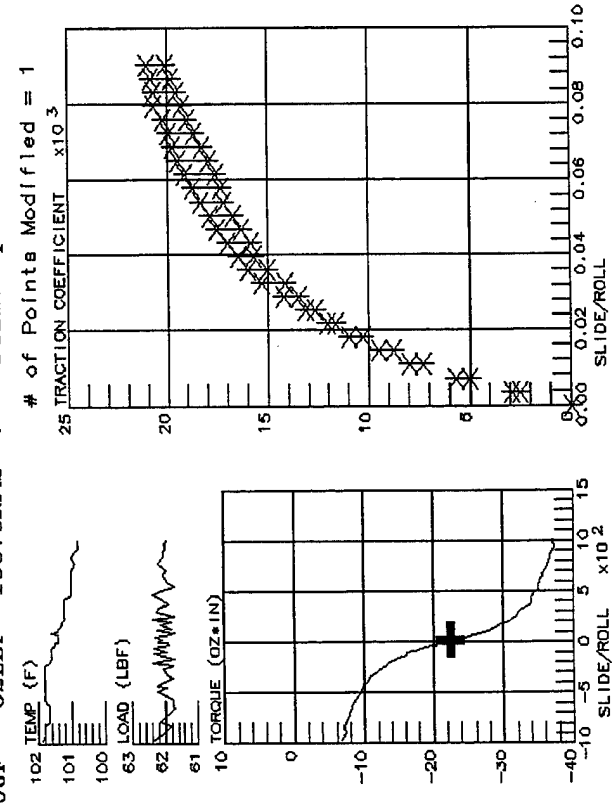
CP 90-715 ~300 Hatcol 3110 #77
100F 18LBF 10370RPM 5 FILE: cp100h



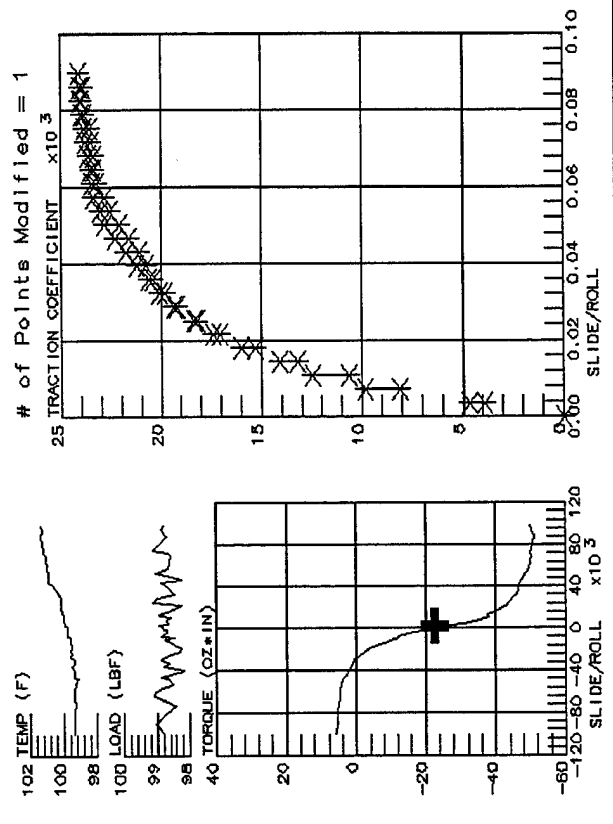
CP 90-715 ~300 Hatcol 3110 #78
100F 36LBF 10370RPM 6 FILE: cp100h



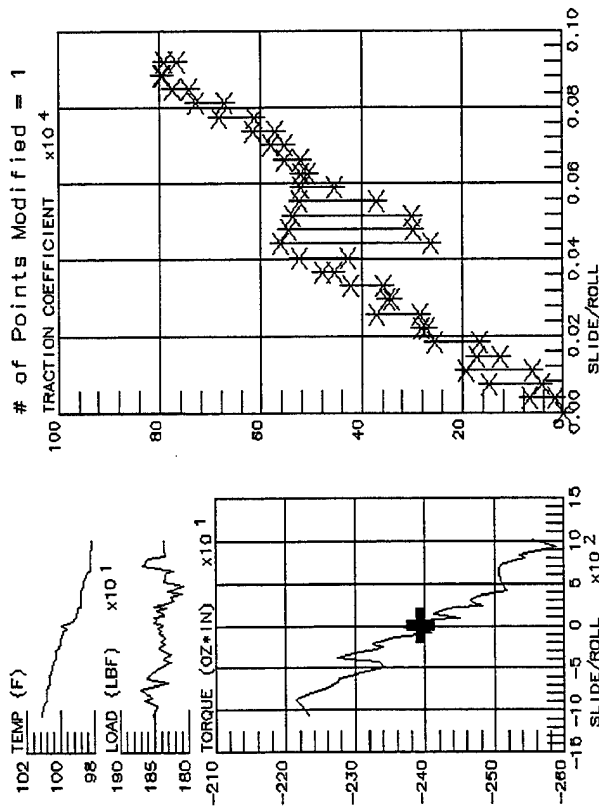
CP 90-715 ~300 Hatcol 3110 #79
100F 62LBF 10370RPM 7 FILE: cp100h



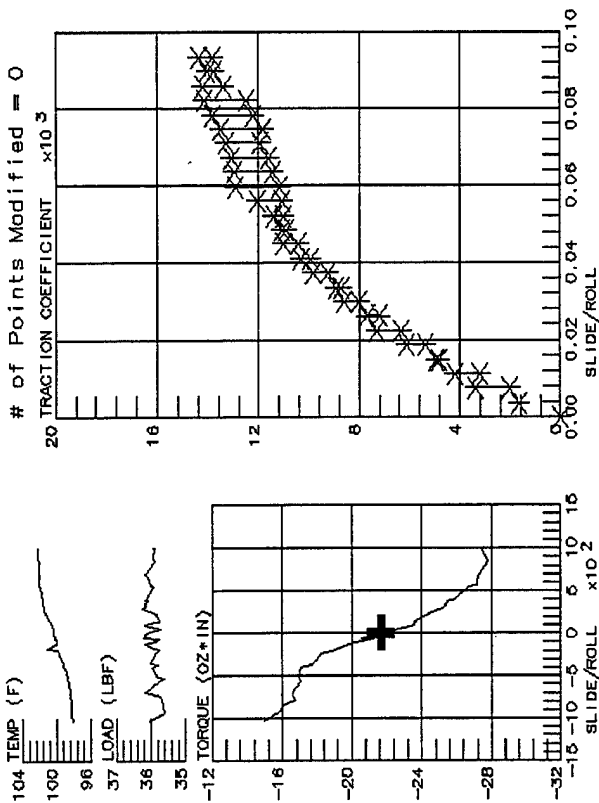
CP 90-715 ~300 Hatcol 3110 #80
100F 99LBF 10370RPM 8 FILE: cp100h



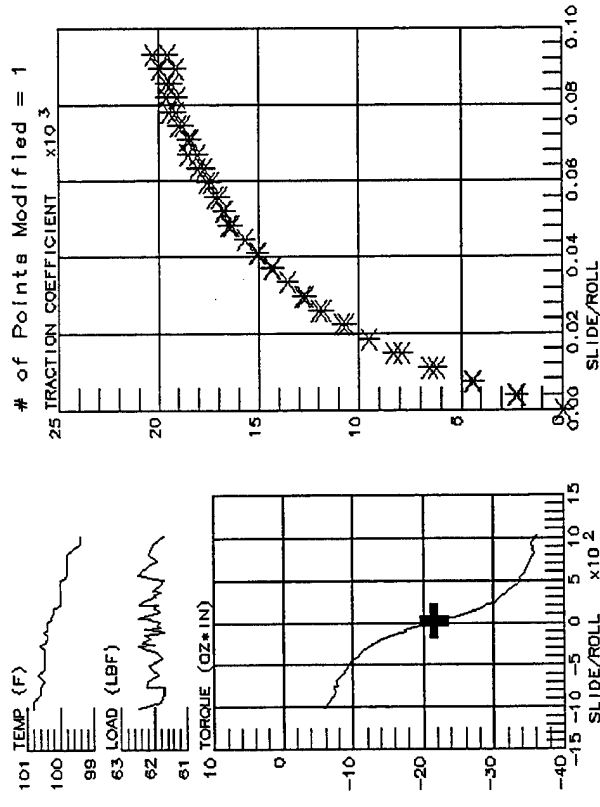
CP 90-715 ~300 Hatcol 3110 #81
100F 18LBF 7770RPM 1 FILE: cp100hxx



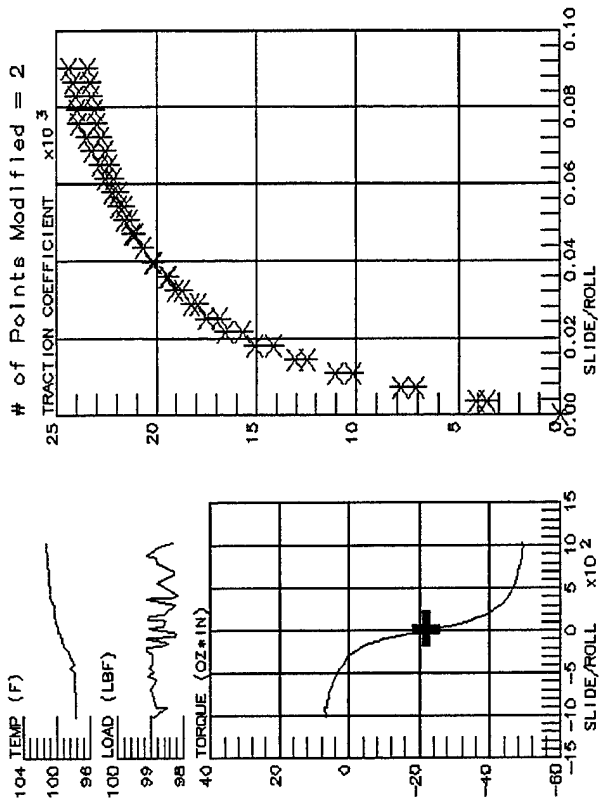
CP 90-715 ~300 Hatcol 3110 #82
100F 36LBF 7770RPM 2 FILE: cp100hxx



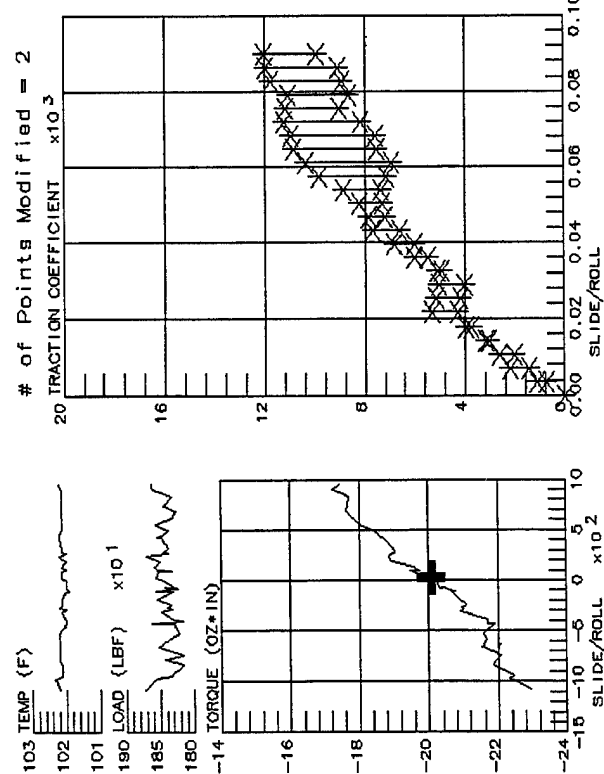
CP 90-715 ~300 Hatcol 3110 #83
100F 62LBF 7770RPM 3 FILE: cp100hxx



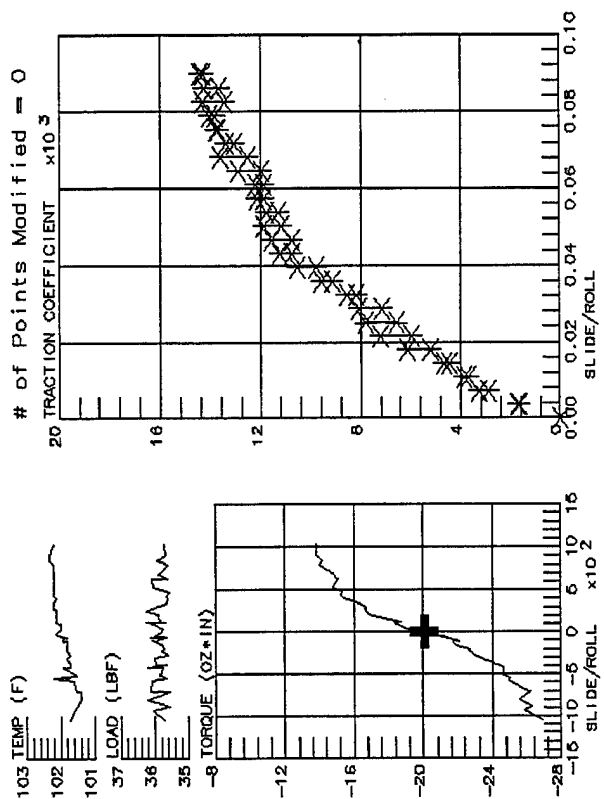
CP 90-715 ~300 Hatcol 3110 #84
100F 99LBF 7770RPM 4 FILE: cp100hxx



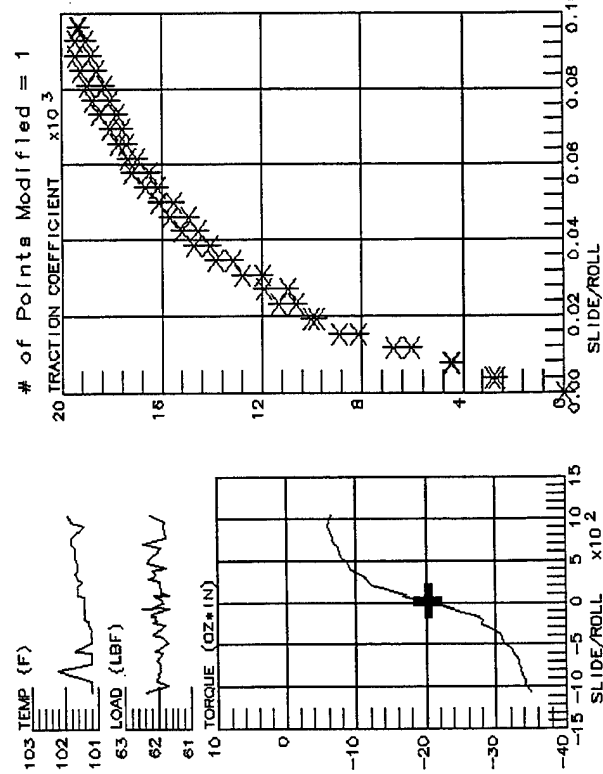
CP 90-715 ~300 Hatcol 3110 #85
100F 18LBF 7770RPM 5 FILE: cp100hxx



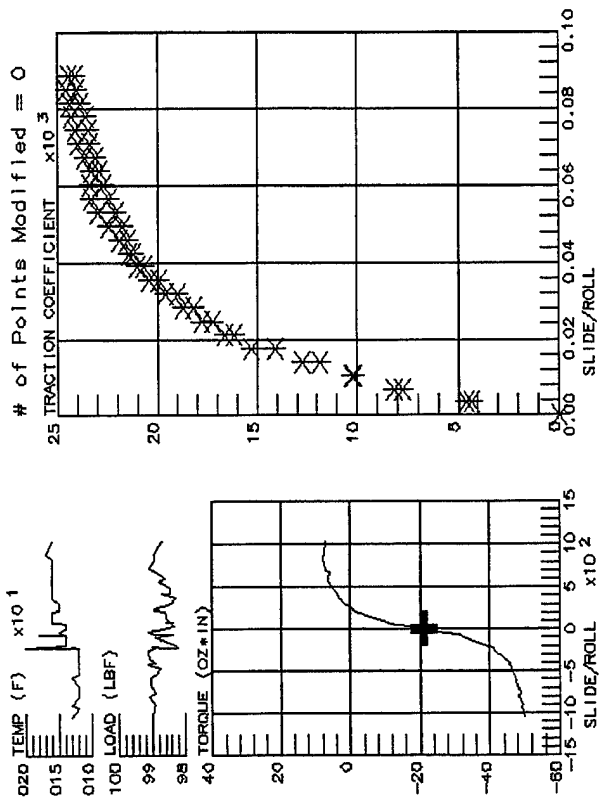
CP 90-715 ~300 Hatcol 3110 #86
100F 36LBF 7770RPM 6 FILE: cp100hxx



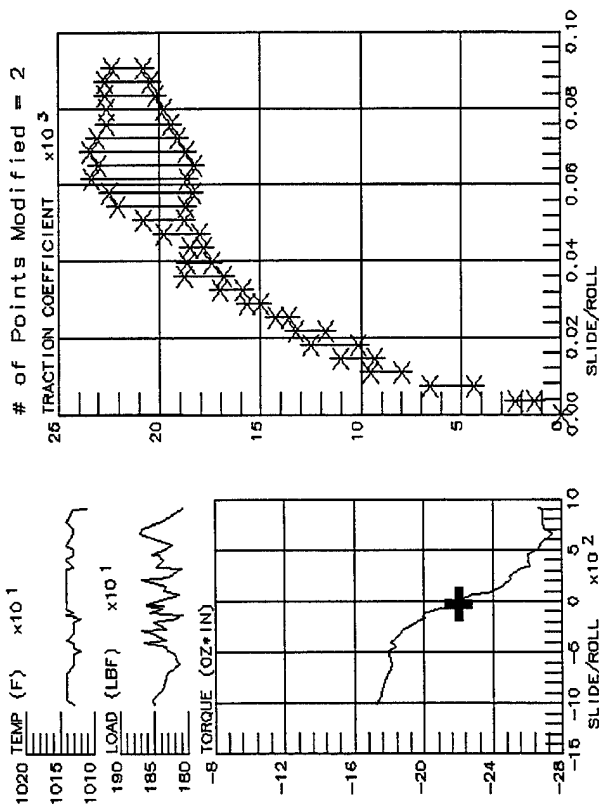
CP 90-715 ~300 Hatcol 3110 #87
100F 62LBF 7770RPM 7 FILE: cp100hxx



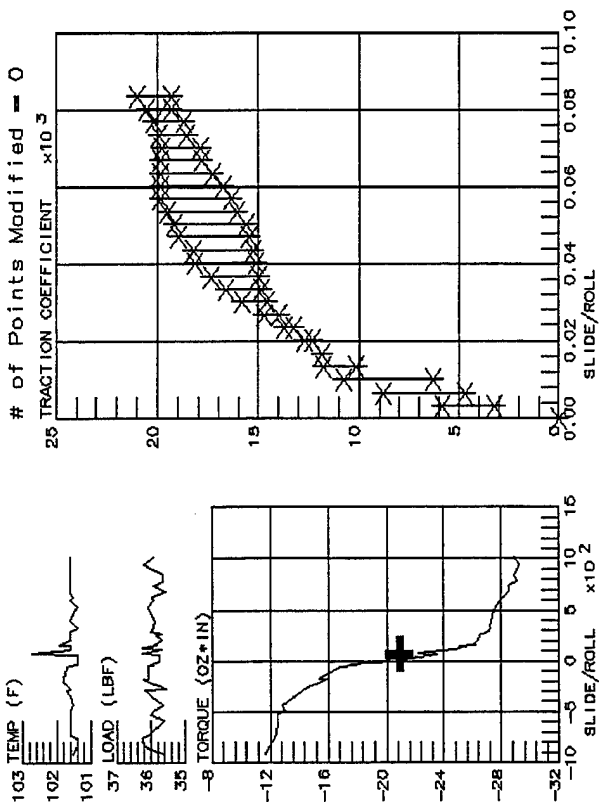
CP 90-715 ~300 Hatcol 3110 #88
100F 99LBF 7770RPM 8 FILE: cp100hxx



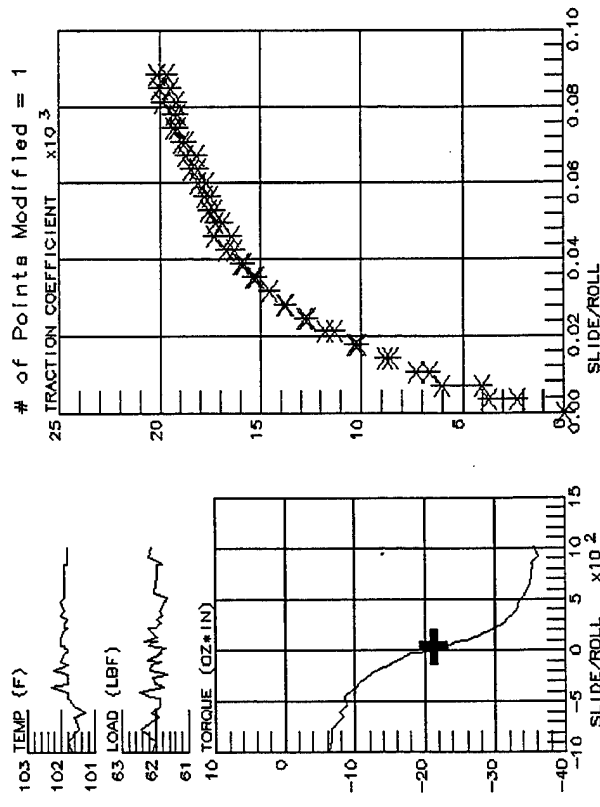
CP 90-715 ~300 Hatcol 3110 #89
100F 181BF 10370RPM 9 FILE: cp100hxx



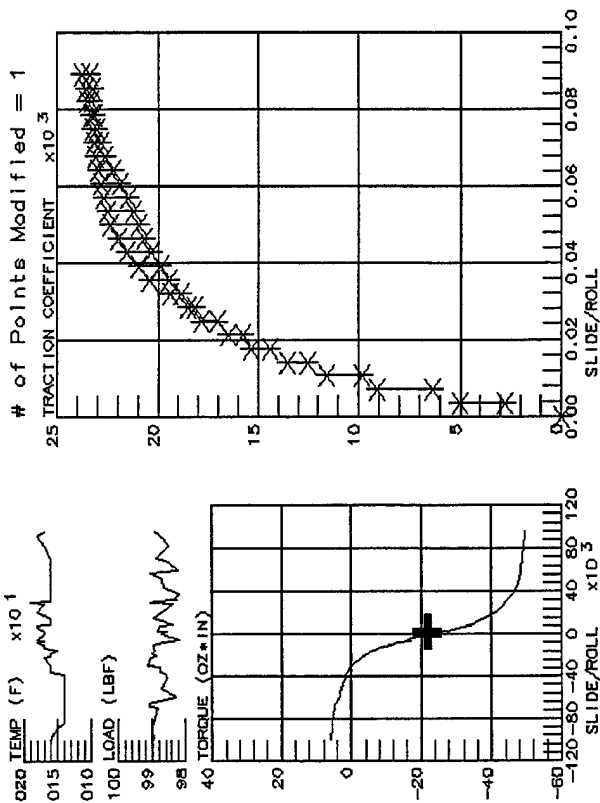
CP 90-715 ~300 Hatcol 3110 #90
100F 36LBF 10370RPM 10 FILE: cp100hxx



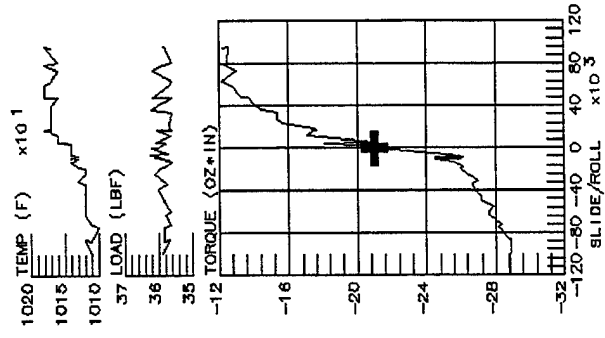
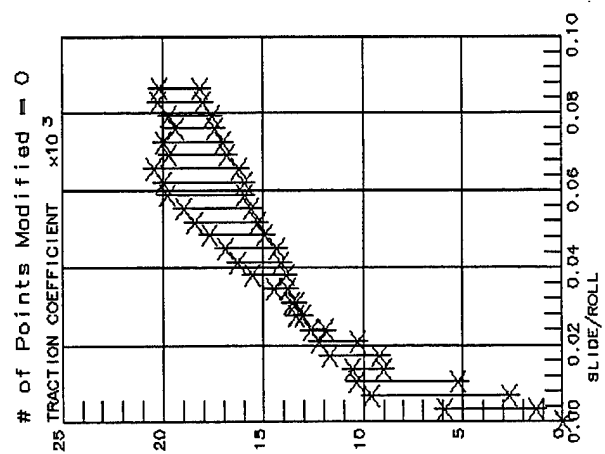
CP 90-715 ~300 Hatcol 3110 #91
100F 62LBF 10370RPM 11 FILE: cp100hxx



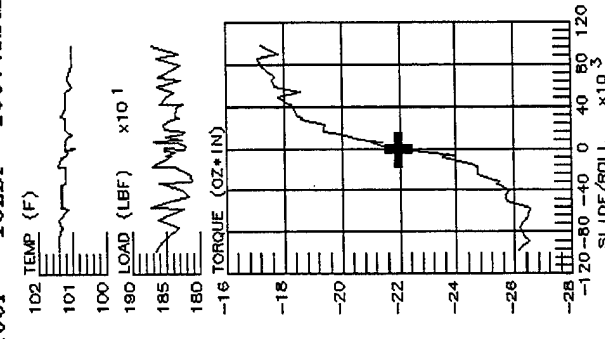
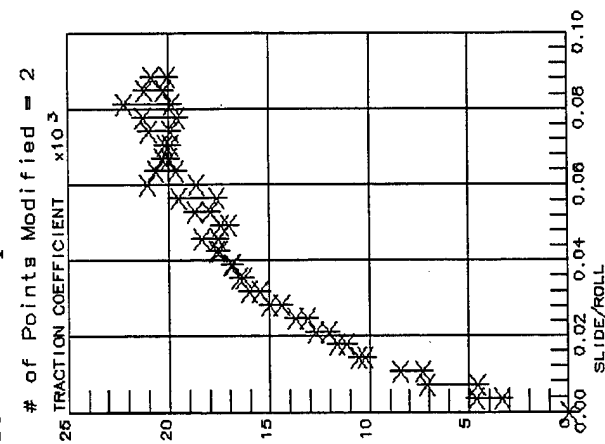
CP 90-715 ~300 Hatcol 3110 #92
100F 99LBF 10370RPM 12 FILE: cp100hxx



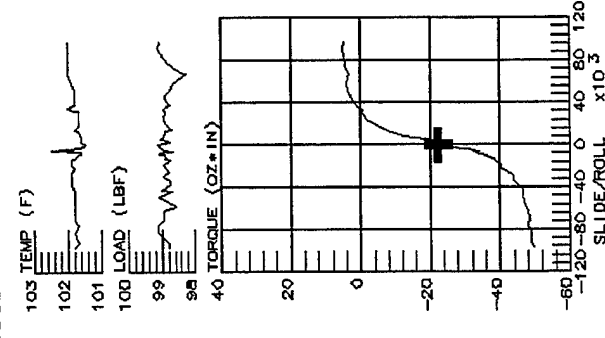
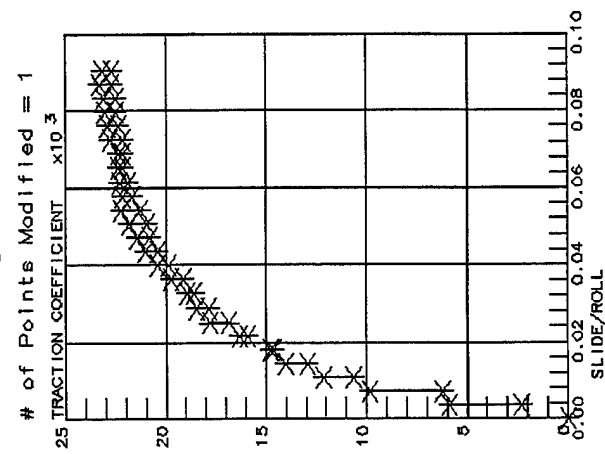
CP 90-715 ~300 Hatcol 3110 #94
100F 36LBF 10370RPM 14 FILE: cp100hxx



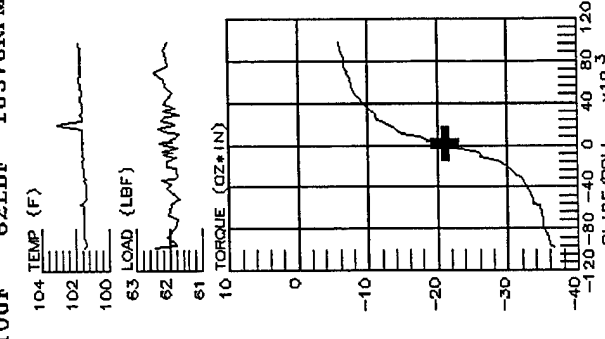
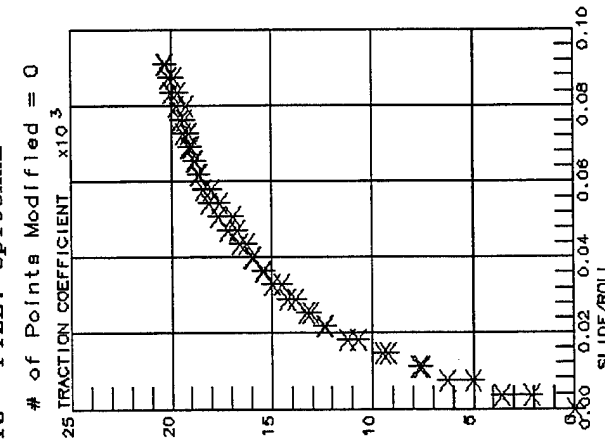
CP 90-715 ~300 Hatcol 3110 #93
100F 16LBF 10370RPM 13 FILE: cp100hxx



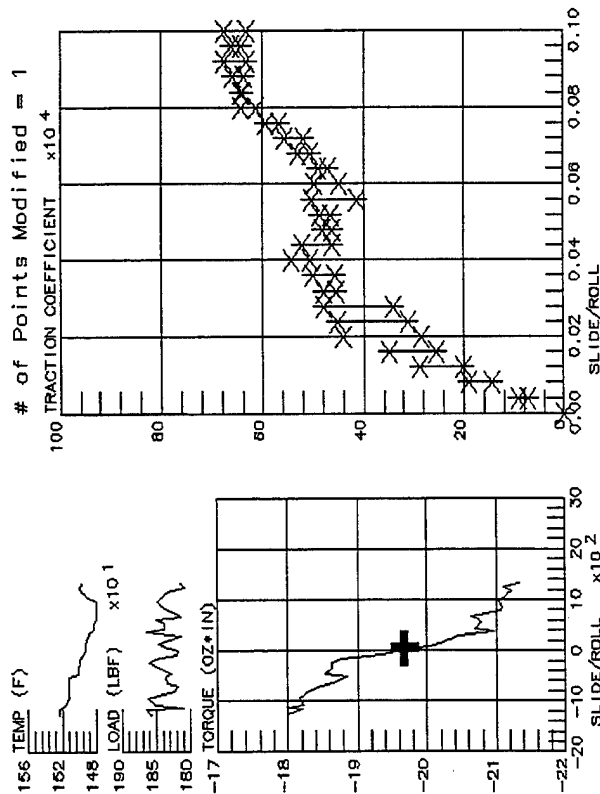
CP 90-715 ~300 Hatcol 3110 #96
100F 99LBF 10370RPM 16 FILE: cp100hxx



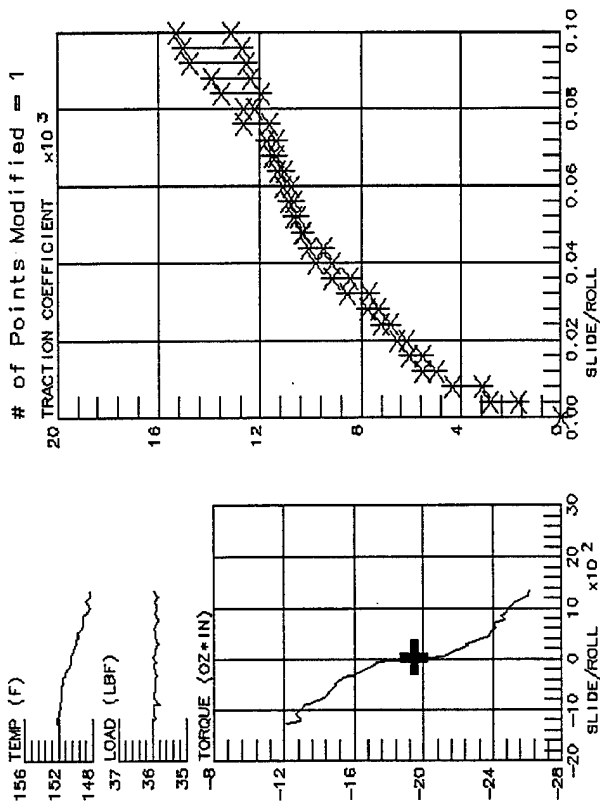
CP 90-715 ~300 Hatcol 3110 #95
100F 62LBF 10370RPM 15 FILE: cp100hxx



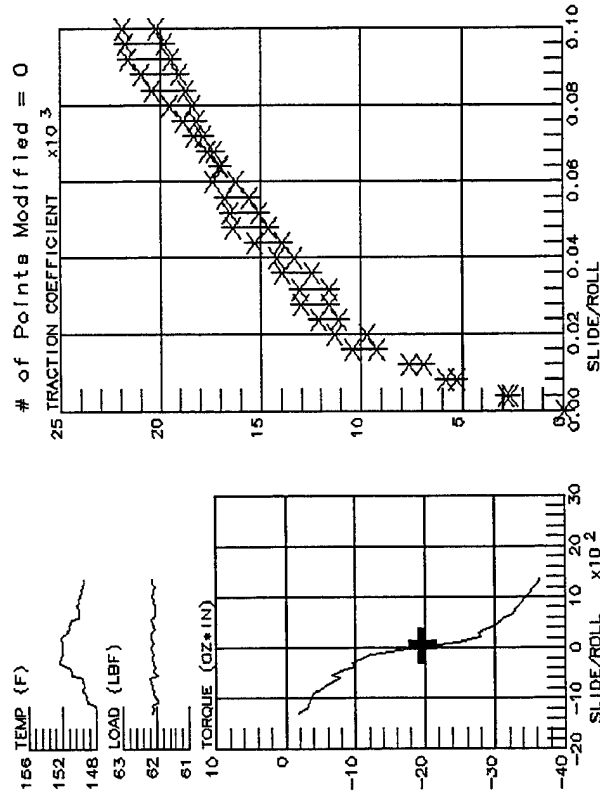
CP 90-715 ~300 Hatcol 3110 #97
150F 18LBF 310RPM 1 FILE: cp1501



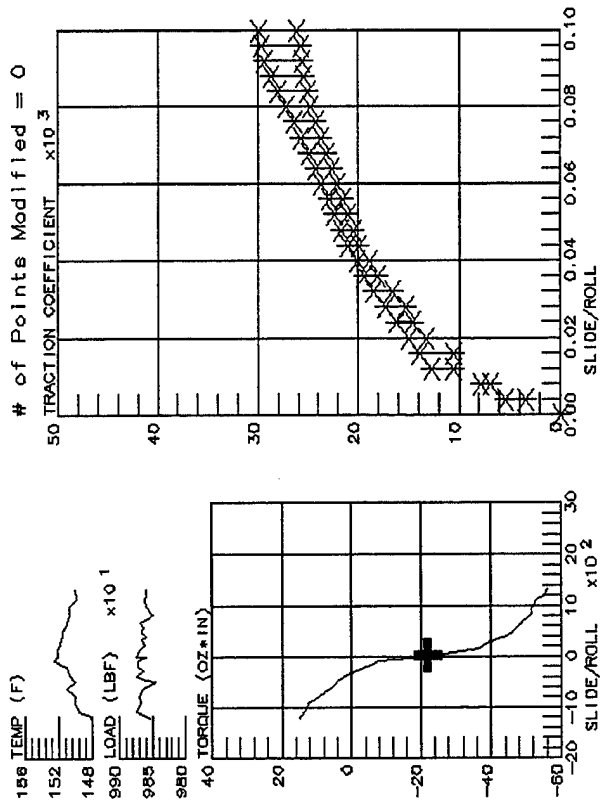
CP 90-715 ~300 Hatcol 3110 #98
150F 36LBF 310RPM 2 FILE: cp1501



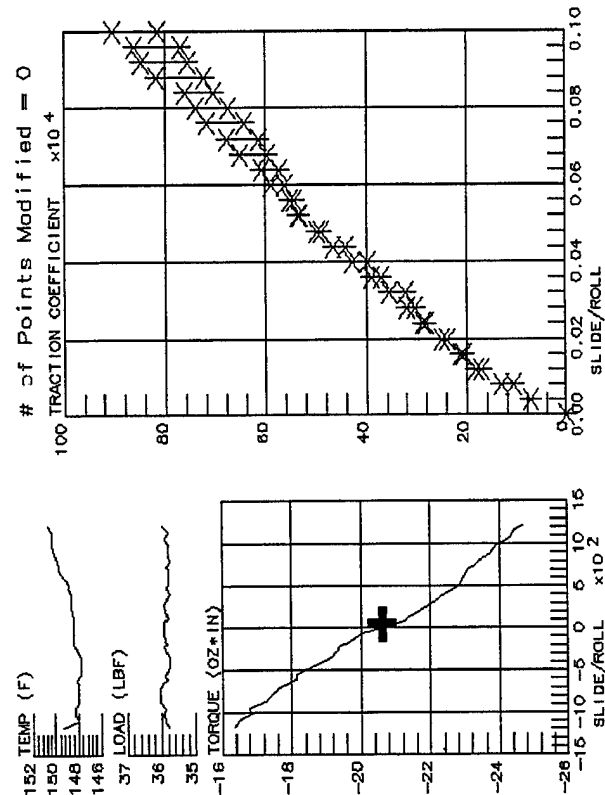
CP 90-715 ~300 Hatcol 3110 #99
150F 62LBF 310RPM 3 FILE: cp1501



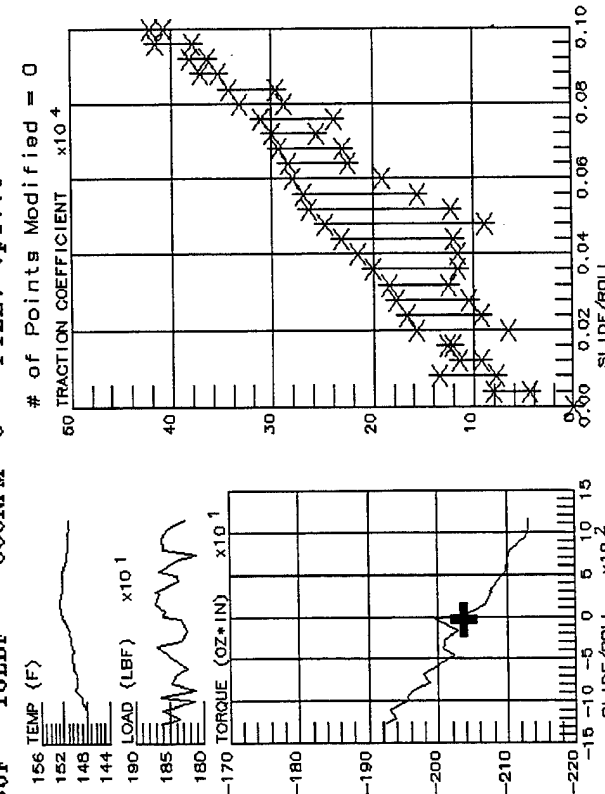
CP 90-715 ~300 Hatcol 3110 #100
150F 99LBF 310RPM 4 FILE: cp1501



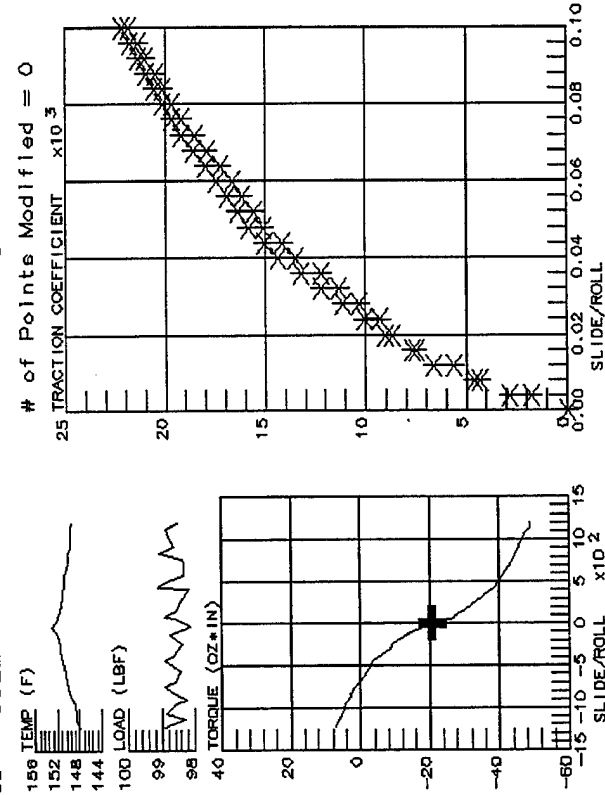
CP 90-715 ~300 Hatcol 3110 #102
150F 38LBF 660RPM 6 FILE: cp1501



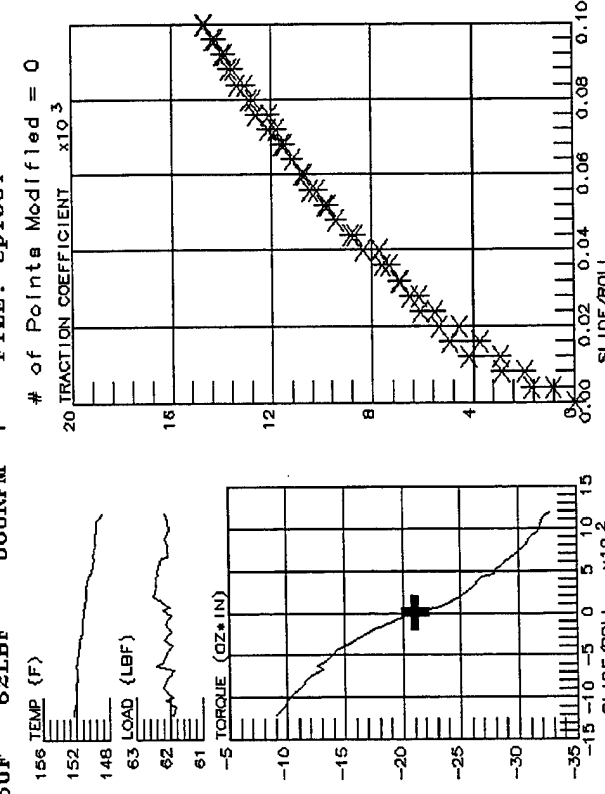
CP 90-715 ~300 Hatcol 3110 #101
150F 18LBF 660RPM 6 FILE: cp1501



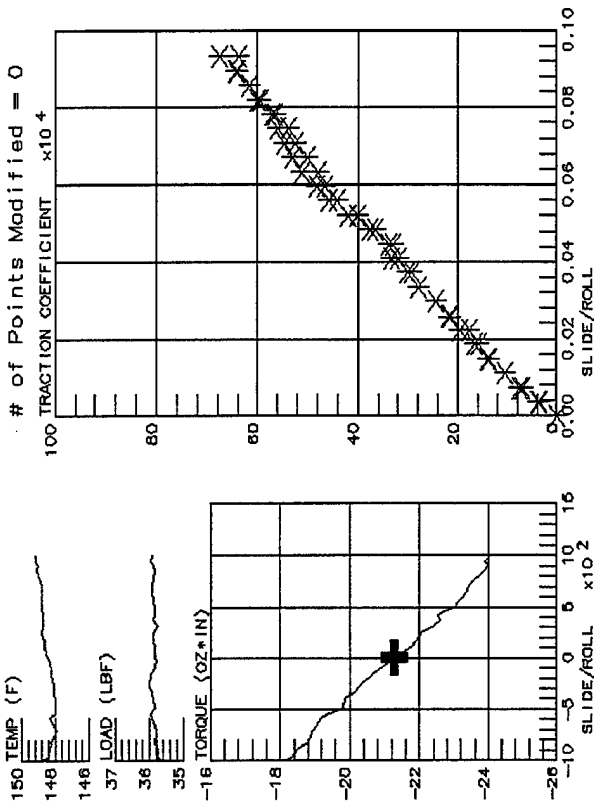
CP 90-715 ~300 Hatcol 3110 #104
150F 99LBF 660RPM 6 FILE: cp1501



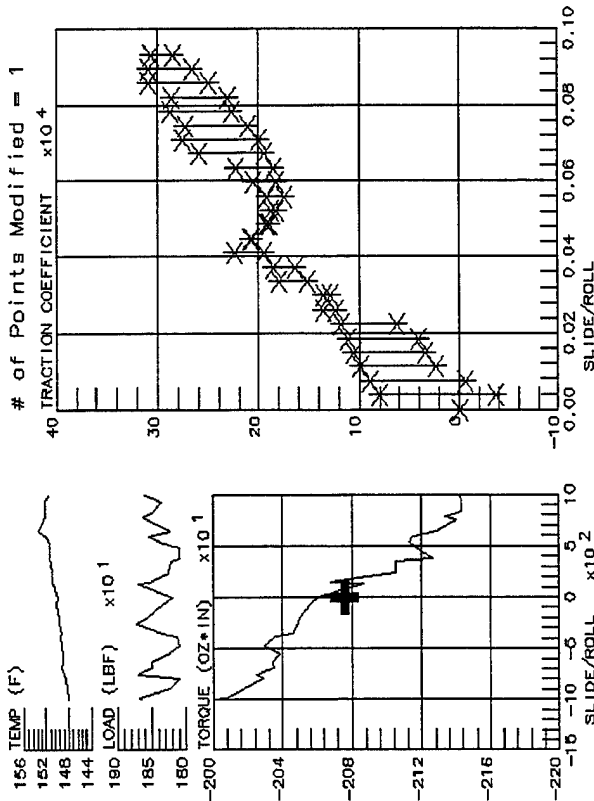
CP 90-715 ~300 Hatcol 3110 #103
150F 62LBF 660RPM 7 FILE: cp1501



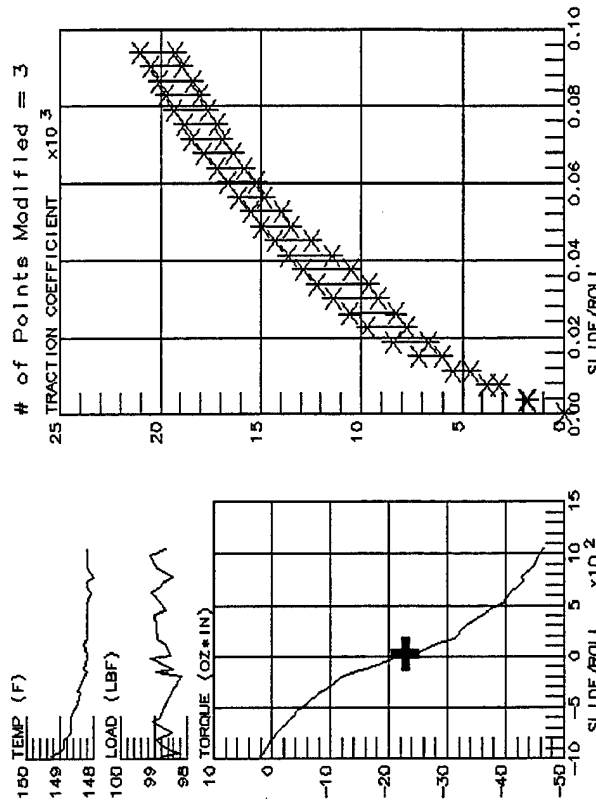
CP 90-715 ~300 Hatcol 3110 #108
150F 36LBF 1280RPM 10 FILE: cp1501
of Points Modified = 0



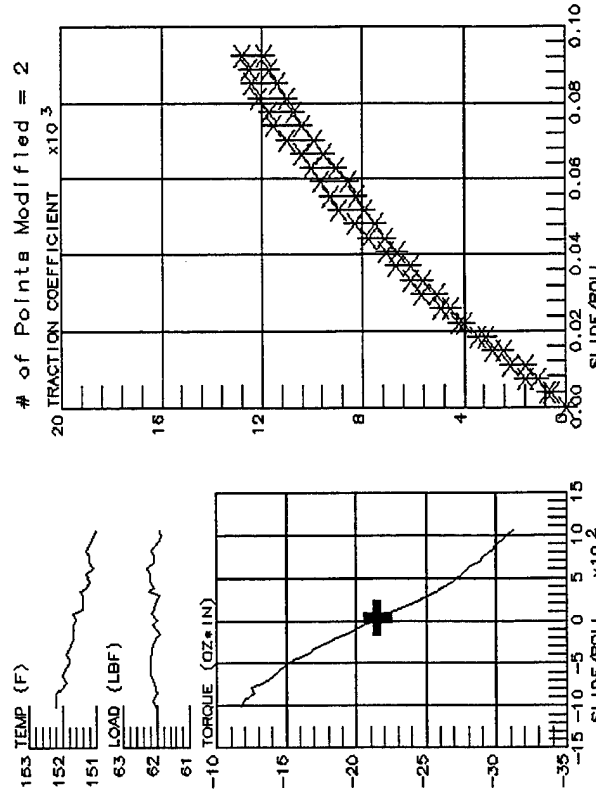
CP 90-715 ~300 Hatcol 3110 #105
150F 16LBF 1280RPM 9 FILE: cp1501
of Points Modified = 1

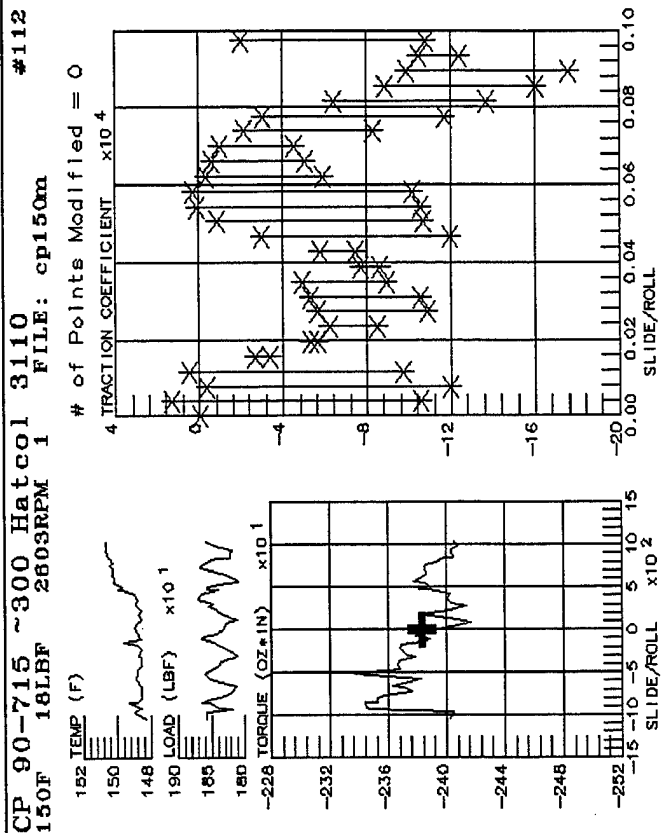
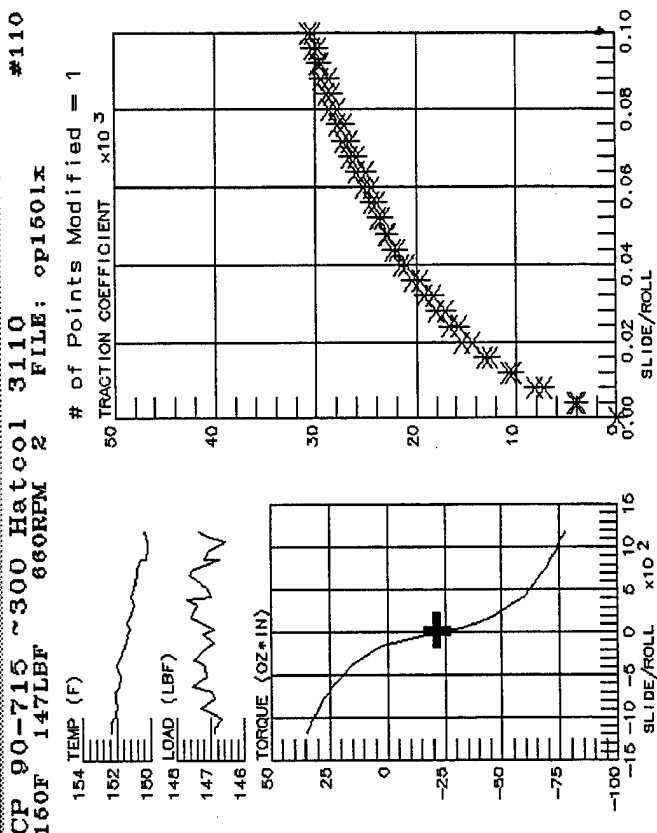
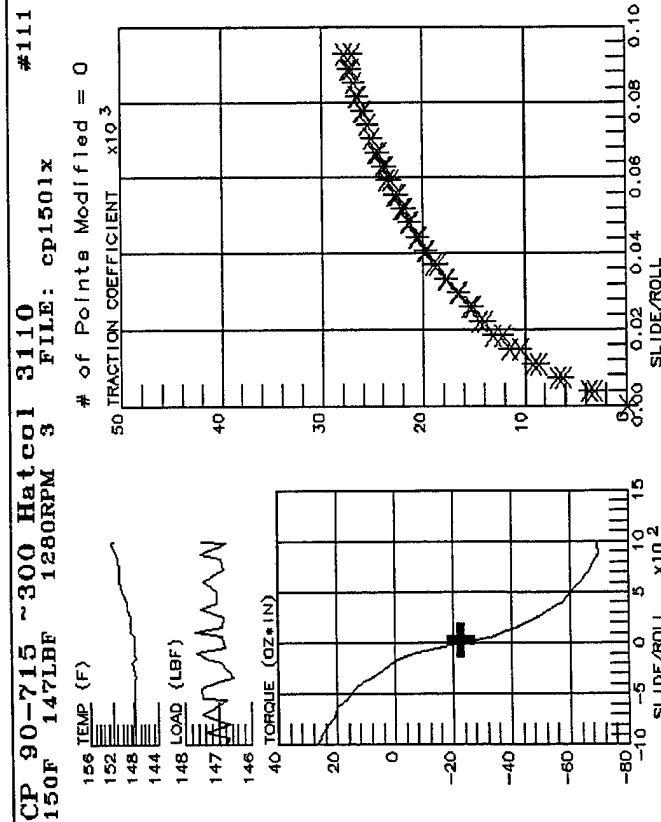
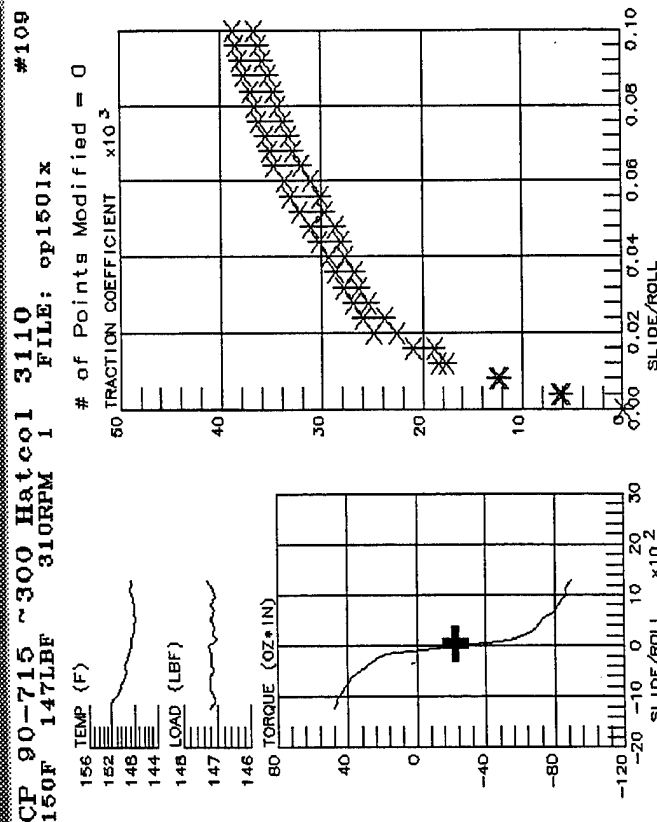


CP 90-715 ~300 Hatcol 3110 #108
150F 99LBF 1280RPM 12 FILE: cp1501
of Points Modified = 3

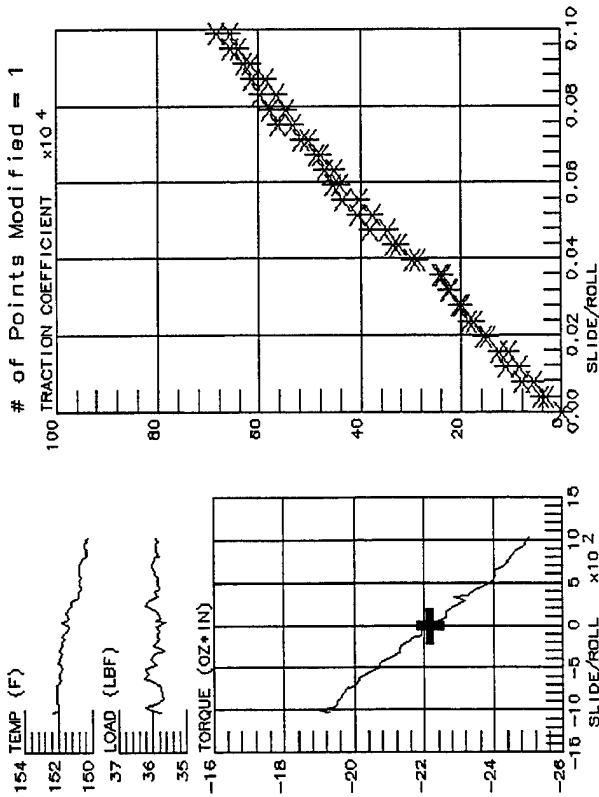


CP 90-715 ~300 Hatcol 3110 #107
150F 62LBF 1280RPM 11 FILE: cp1501
of Points Modified = 2

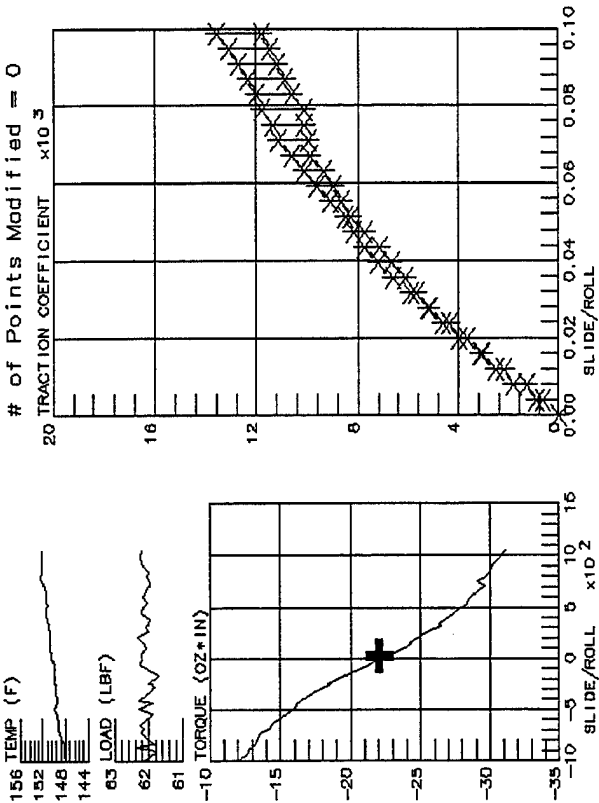




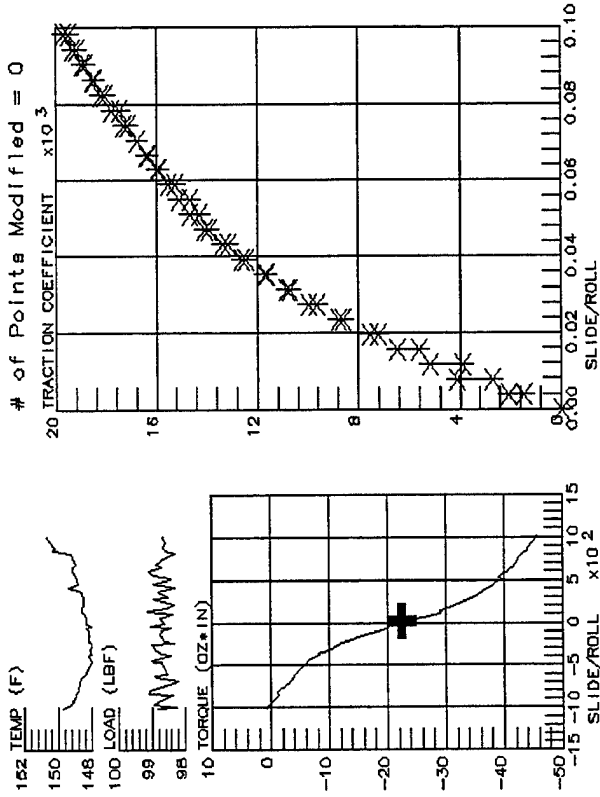
CP 90-715 ~300 Hatcol 3110 #113
150F 36LBF 2603RPM 2 FILE: cp150m

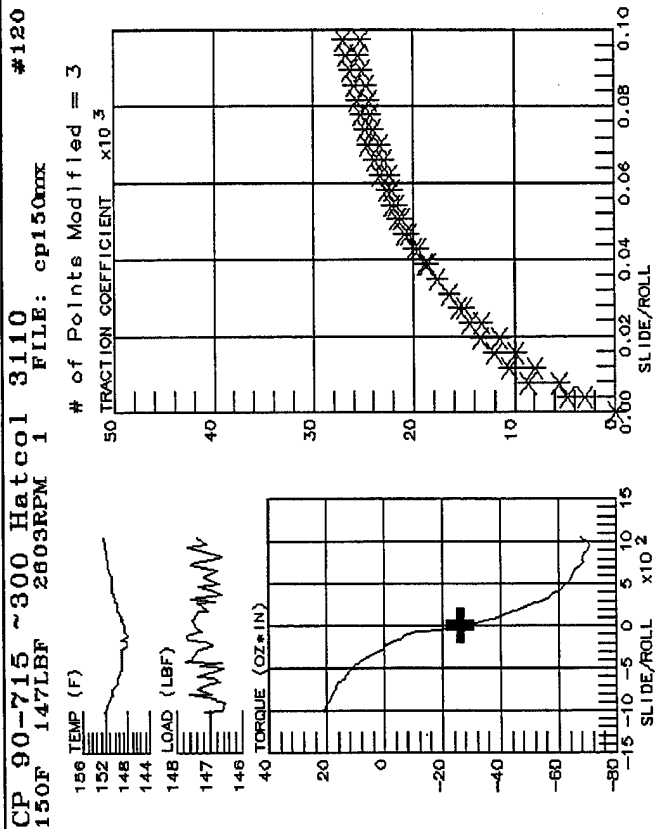
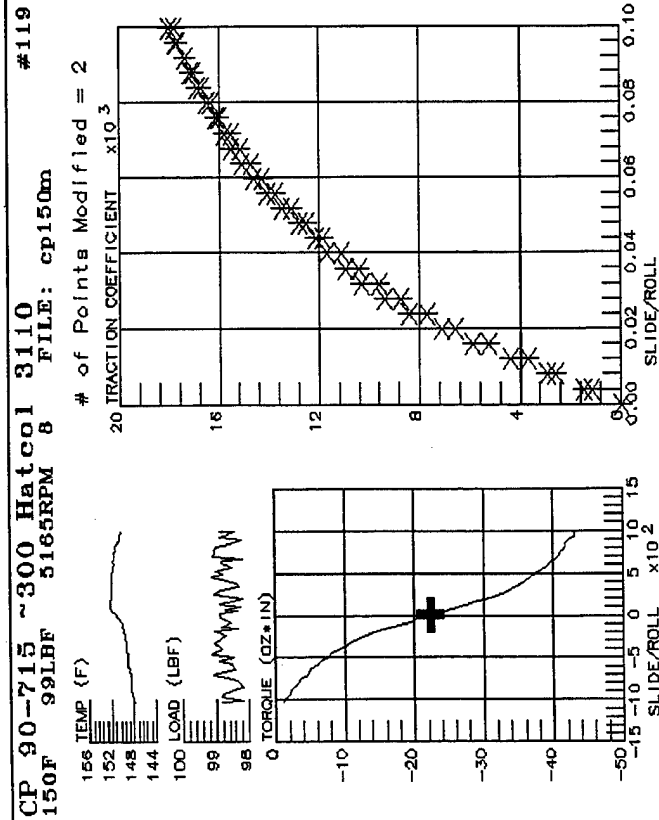
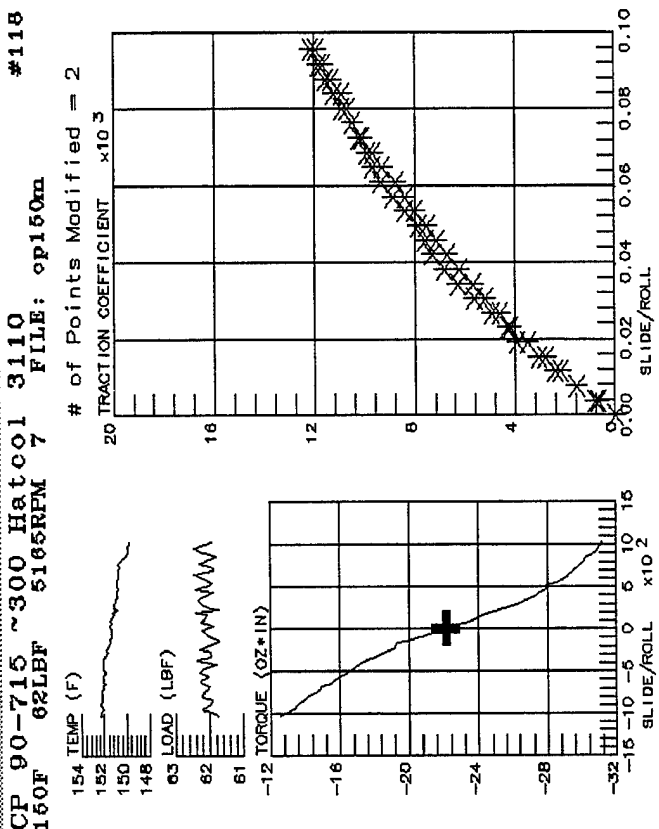
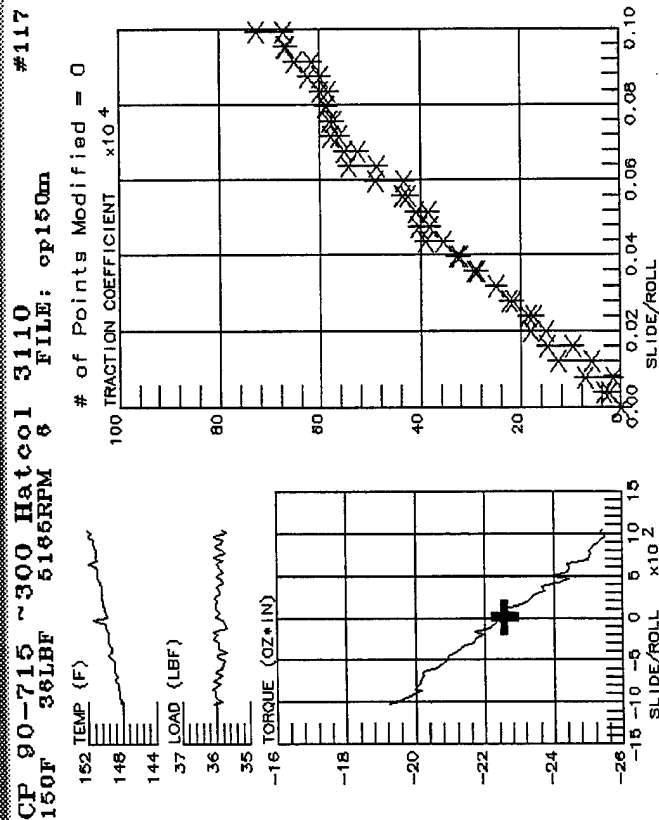


CP 90-715 ~300 Hatcol 3110 #114
150F 62LBF 2603RPM 3 FILE: cp150m

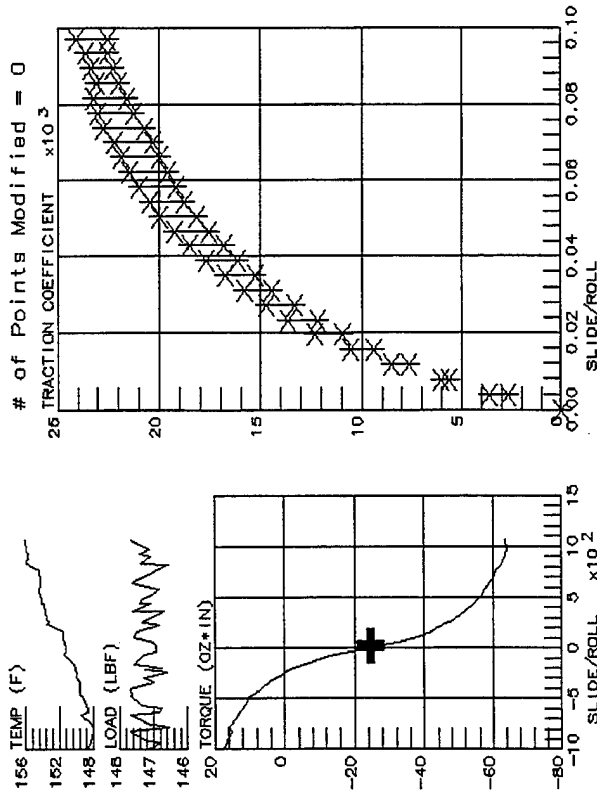


CP 90-715 ~300 Hatcol 3110 #115
150F 99LBF 2603RPM 4 FILE: cp150m

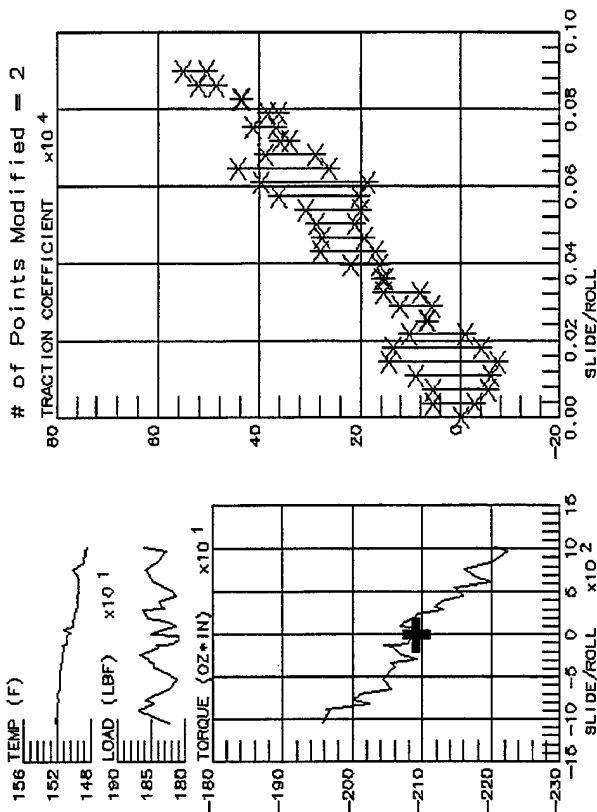




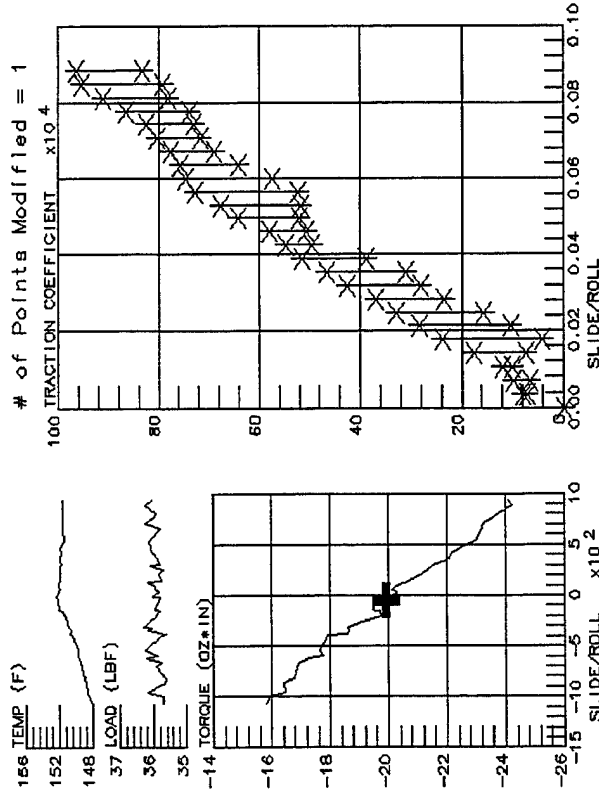
CP 90-715 ~300 Hatcol 3110 #121
150F 147LBF 516RPM 2 FILE: cp150mx



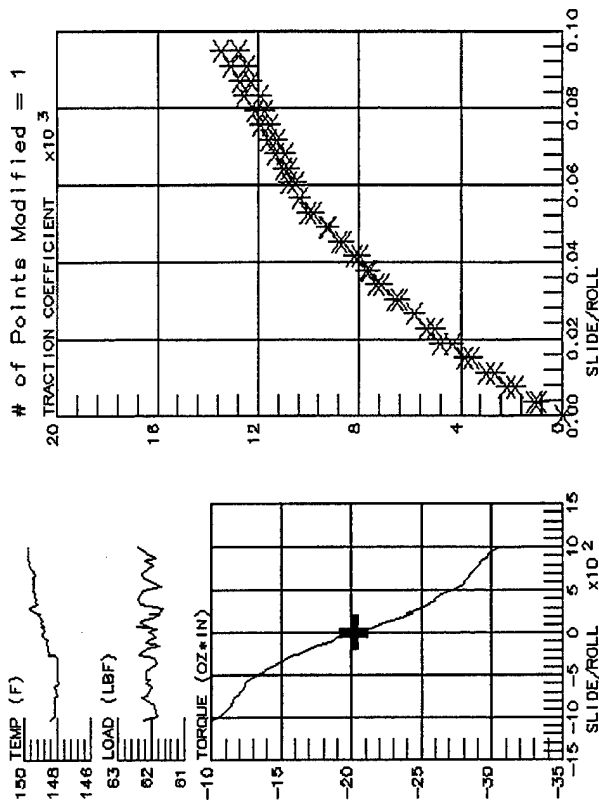
CP 90-715 ~300 Hatcol 3110 #122
150F 18LBF 7770RPM 1 FILE: cp150h

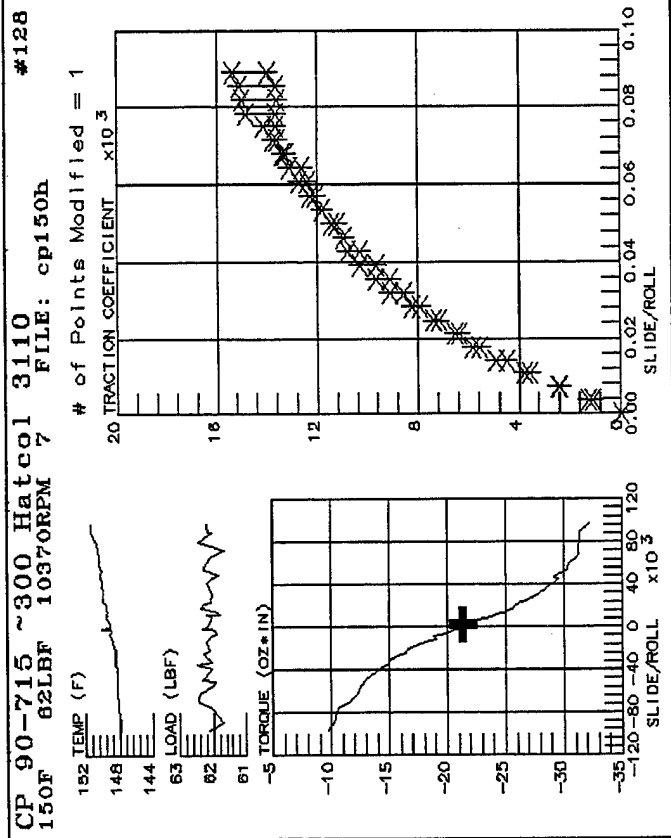
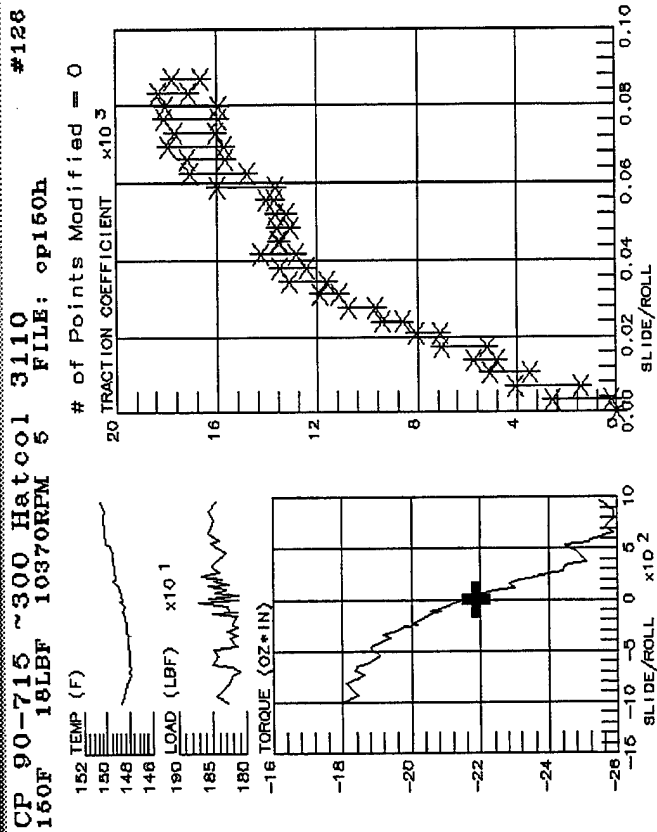
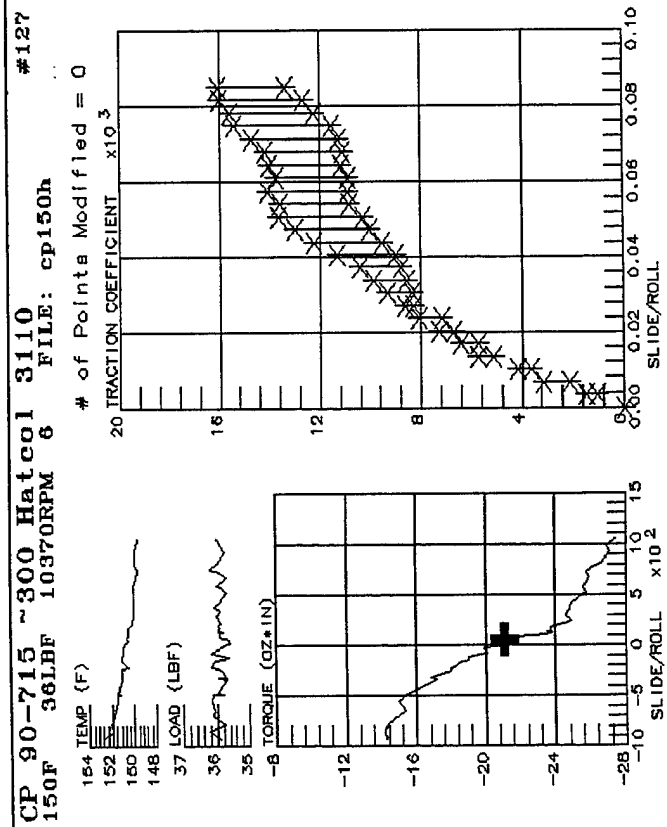
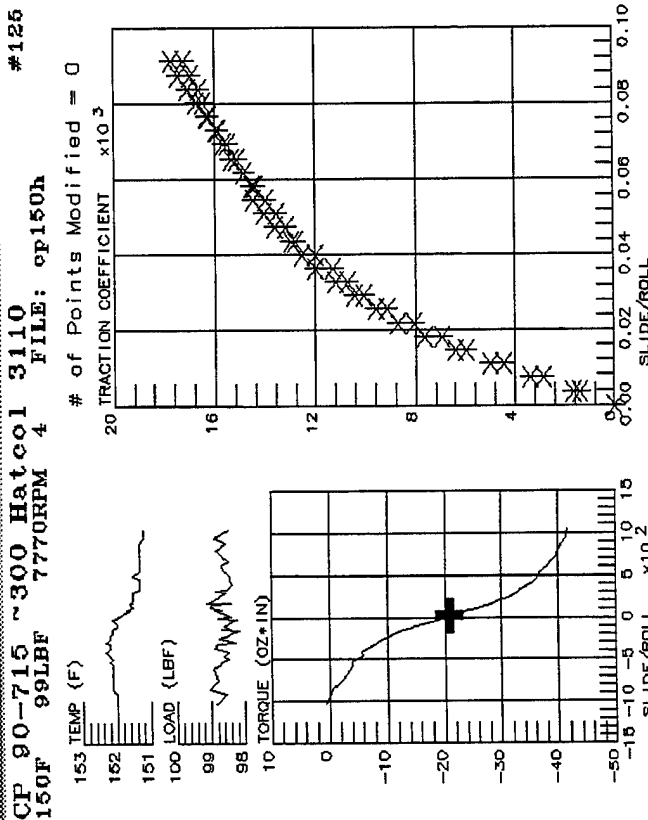


CP 90-715 ~300 Hatcol 3110 #123
150F 36LBF 7770RPM 2 FILE: cp150h



CP 90-715 ~300 Hatcol 3110 #124
150F 62LBF 7770RPM 3 FILE: cp150h

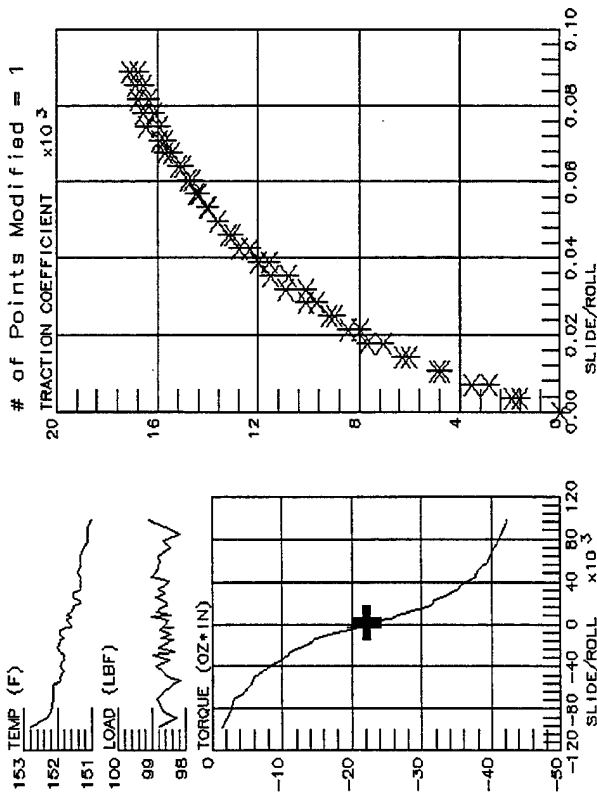




CP 90-715 ~300 Hatcol 3110
150F 99LBF 10370RPM 8 FILE: cp150h

#129

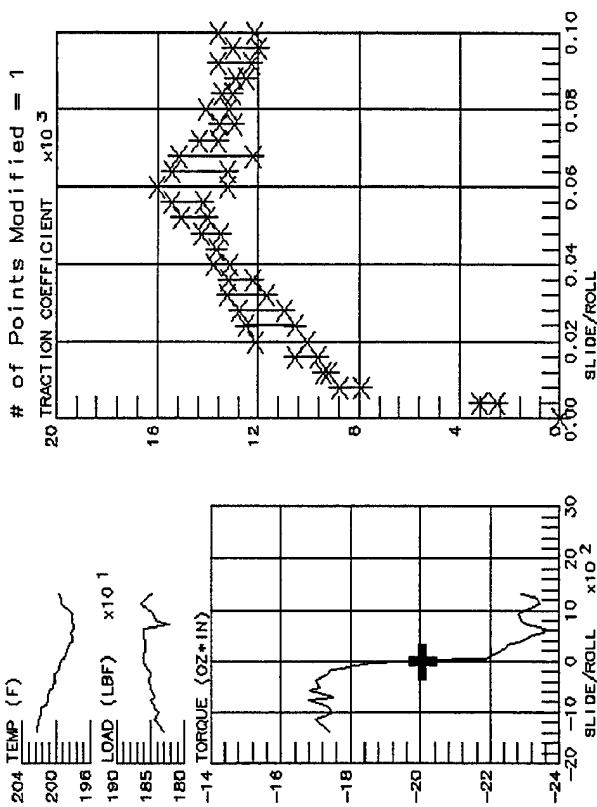
of Points Modified = 1



CP 90-715 ~300 Hatcol 3110
200F 18LBF 310RPM 1 FILE: cp2001

#130

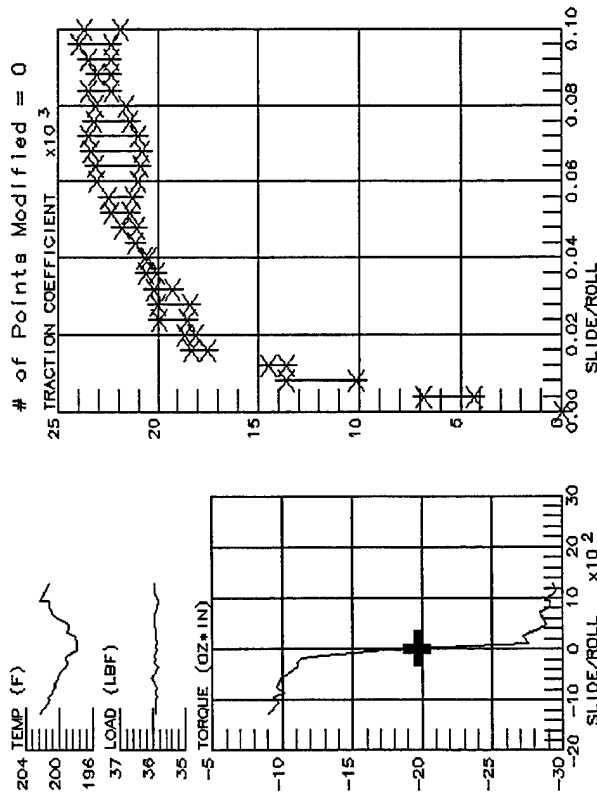
of Points Modified = 1



CP 90-715 ~300 Hatcol 3110
200F 36LBF 310RPM 2 FILE: cp2001

#131

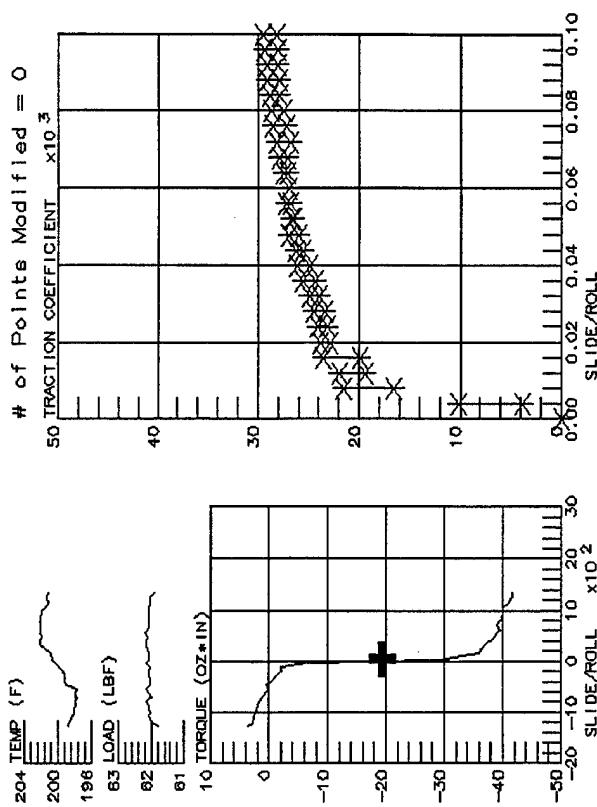
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
200F 82LBF 310RPM 3 FILE: cp2001

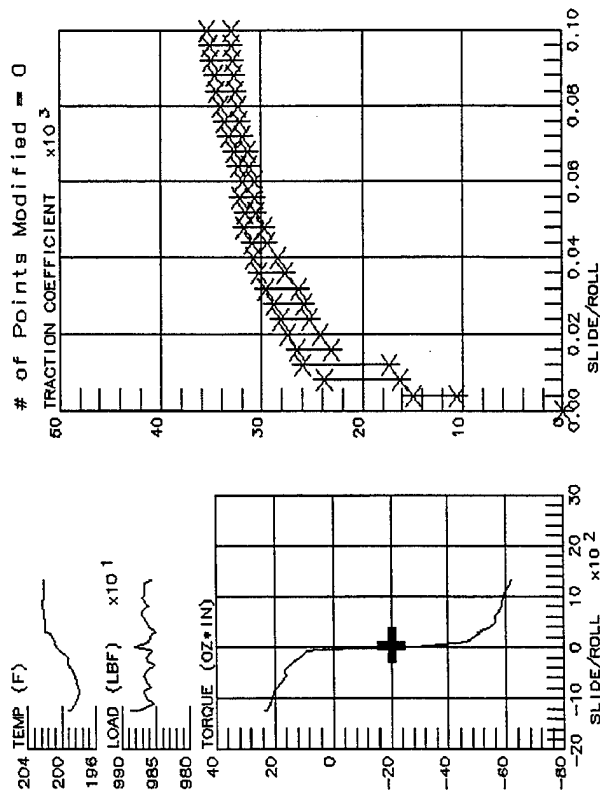
#132

of Points Modified = 0



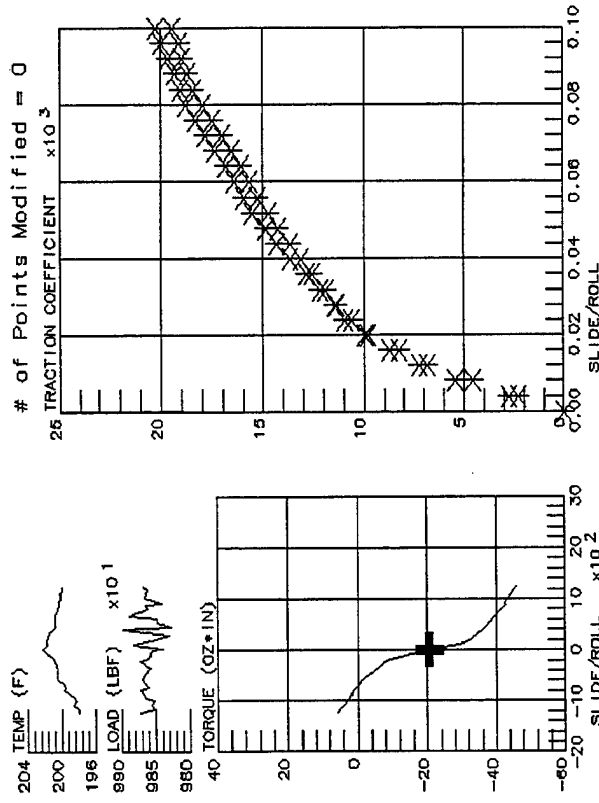
CP 90-715 ~300 Hatcol 3110
200F 99LBF 310RPM 4 FILE: cp2001

#133
of Points Modified = 0

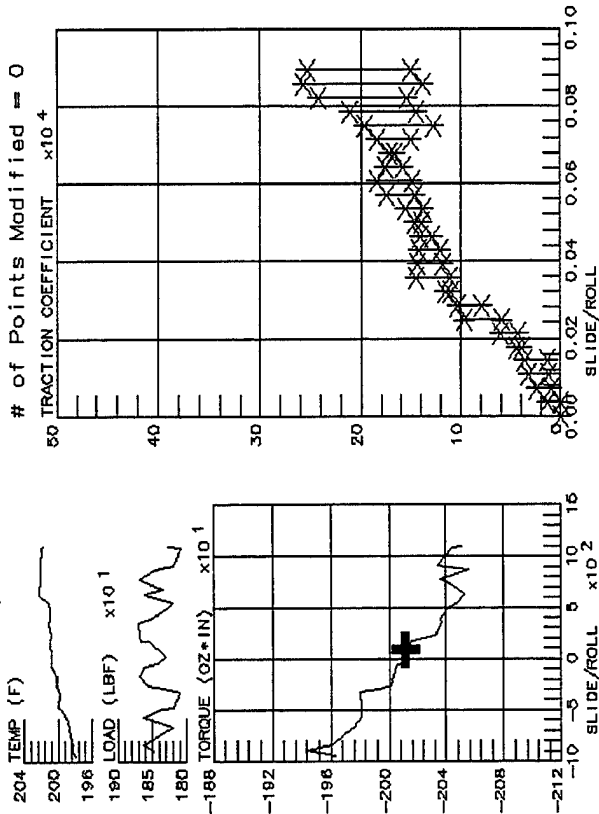


TRACTION MODELING

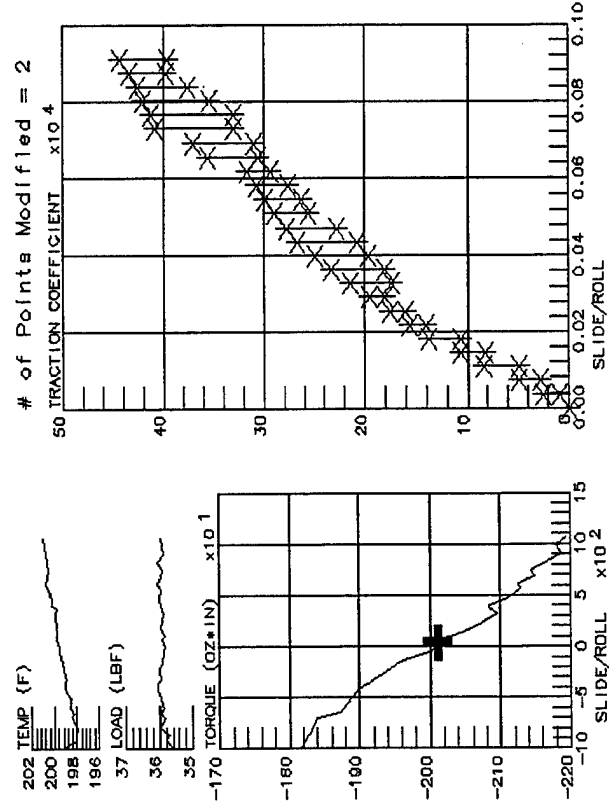
CP 90-715 ~300 Hatcol 3110 #137
200F 99LBF 660RPM 8 FILE: cp2001



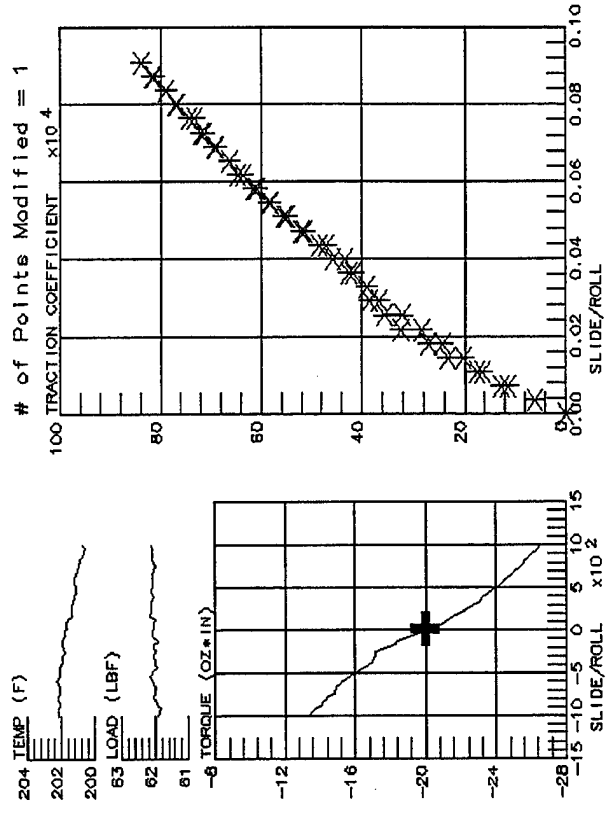
CP 90-715 ~300 Hatcol 3110 #139
200F 18LBF 1280RPM 9 FILE: op2001



CP 90-715 ~300 Hatcol 3110 #139
200F 36LBF 1280RPM 10 FILE: cp2001



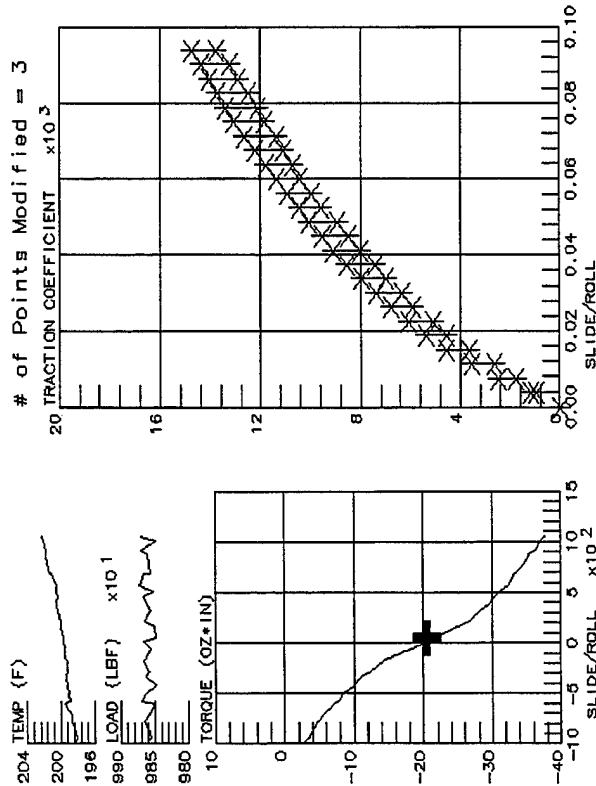
CP 90-715 ~300 Hatcol 3110 #140
200F 62LBF 1280RPM 11 FILE: cp2001



CP 90-715 ~300 Hatcol 3110
200F 99LBF 1280RPM 12 FILE: cp2001x

#141

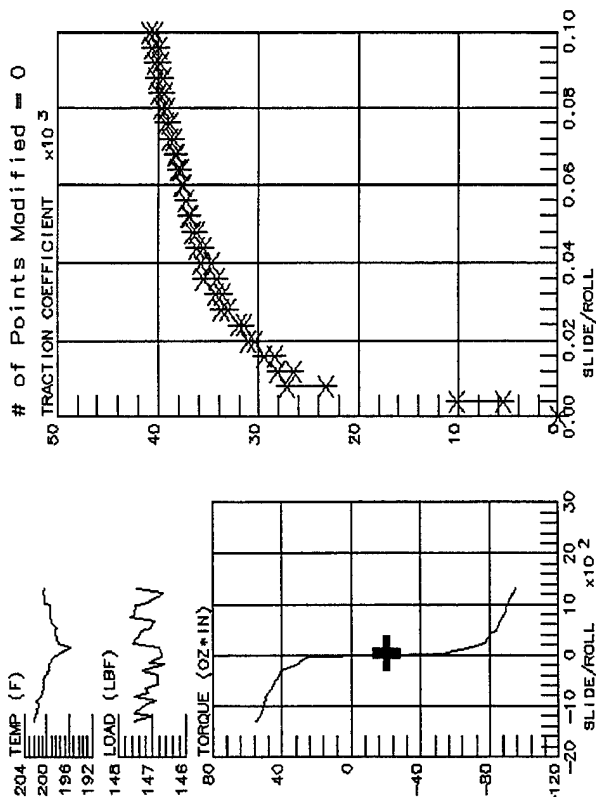
of Points Modified = 3



CP 90-715 ~300 Hatcol 3110
200F 147LBF 310RPM 1 FILE: cp2001x

#142

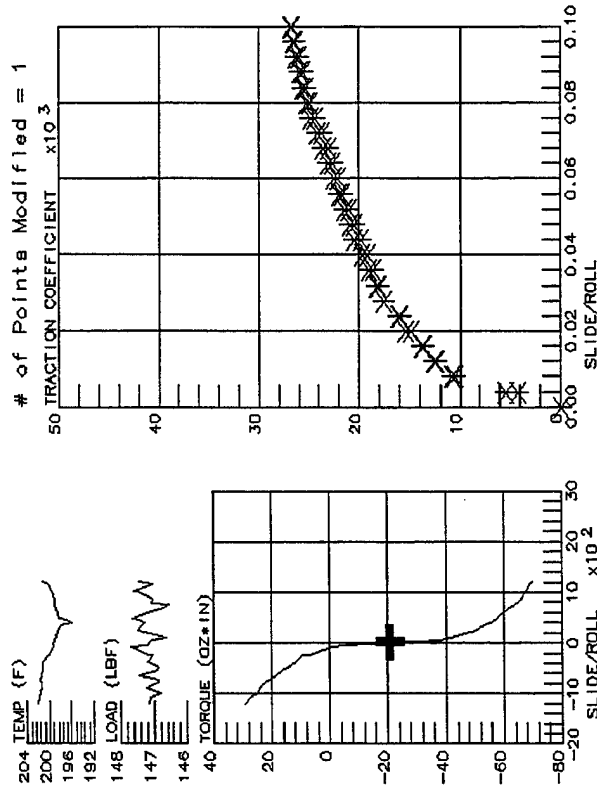
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
200F 147LBF 660RPM 2 FILE: cp2001x

#143

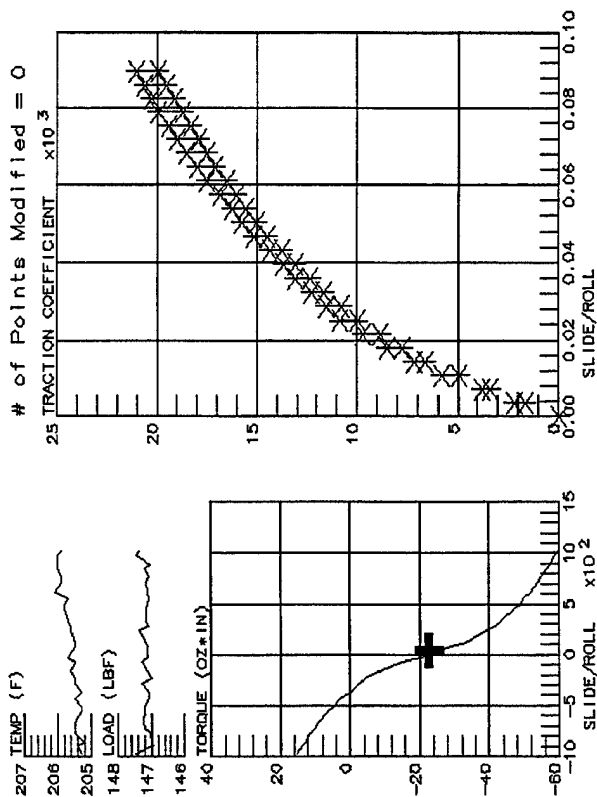
of Points Modified = 1



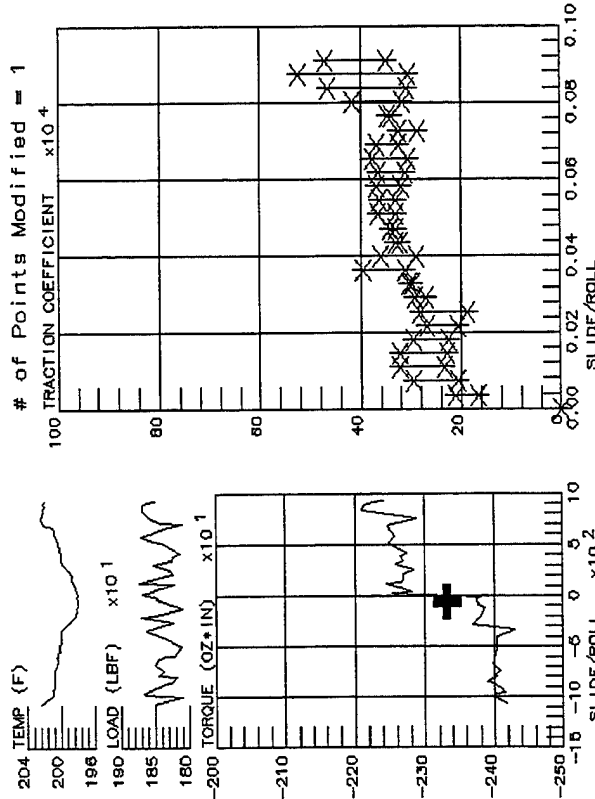
CP 90-715 ~300 Hatcol 3110
200F 147LBF 1280RPM 3 FILE: cp2001x

#144

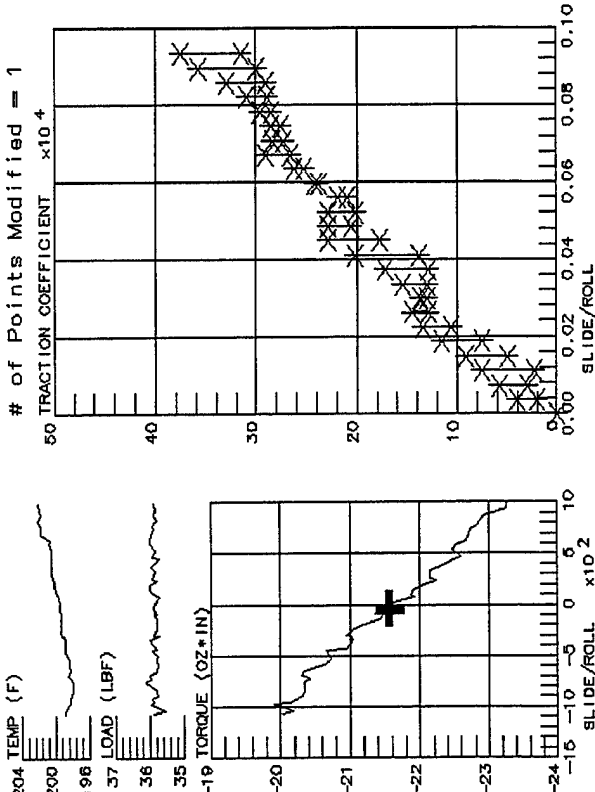
of Points Modified = 0



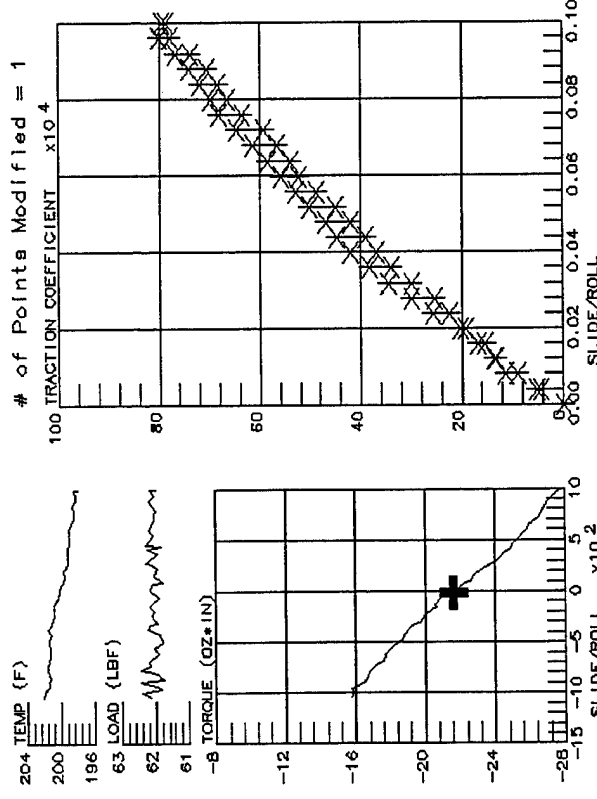
CP 90-715 ~300 Hatcol 3110 #145
200F 18LBF 2603RPM 1 FILE: cp200m



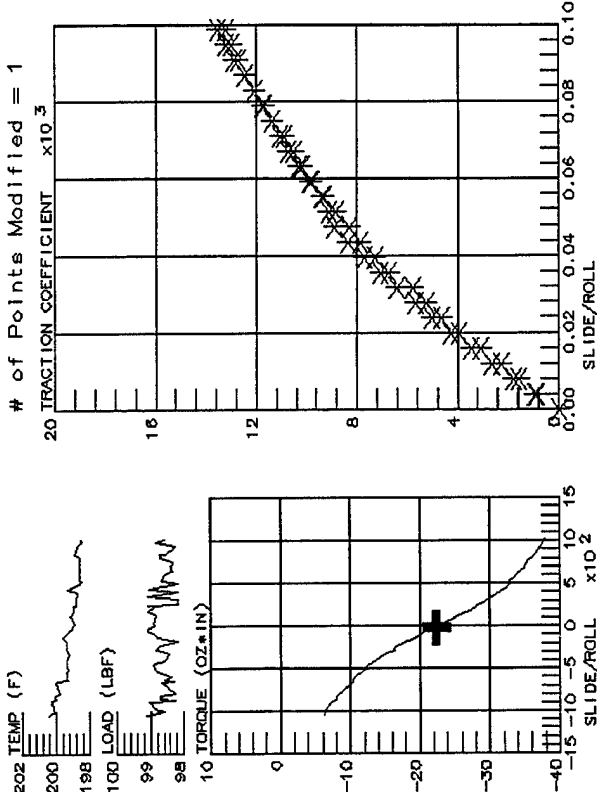
CP 90-715 ~300 Hatcol 3110 #148
200F 36LBF 2603RPM 2 FILE: cp200m



CP 90-715 ~300 Hatcol 3110 #147
200F 62LBF 2603RPM 3 FILE: cp200m

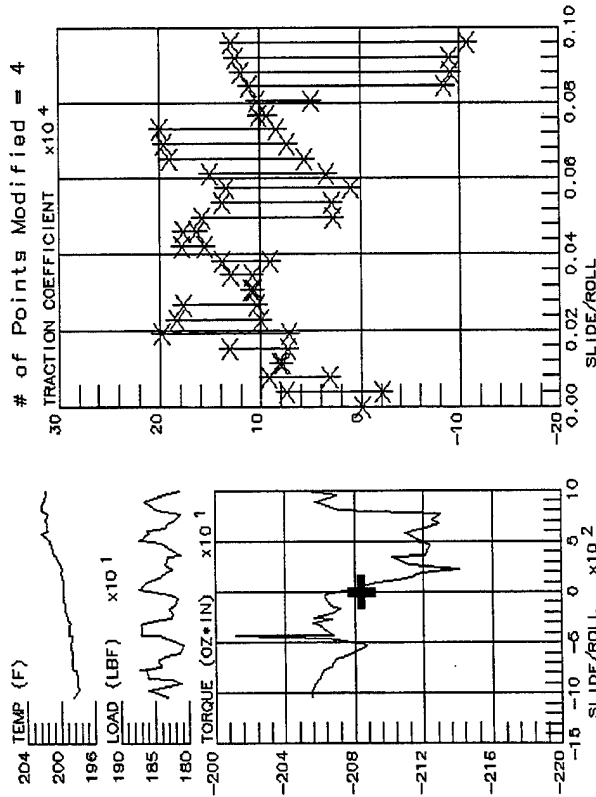


CP 90-715 ~300 Hatcol 3110 #148
200F 99LBF 2603RPM 4 FILE: cp200m

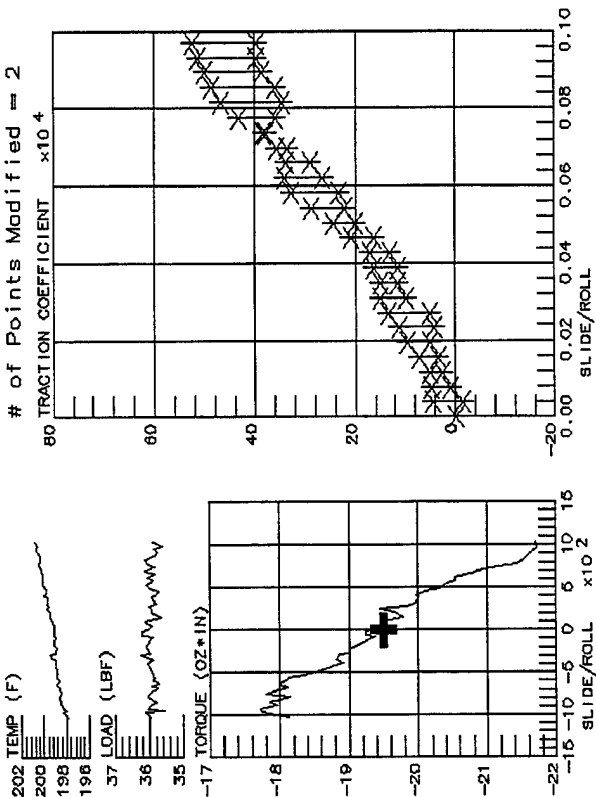


TRACTION MODELLING

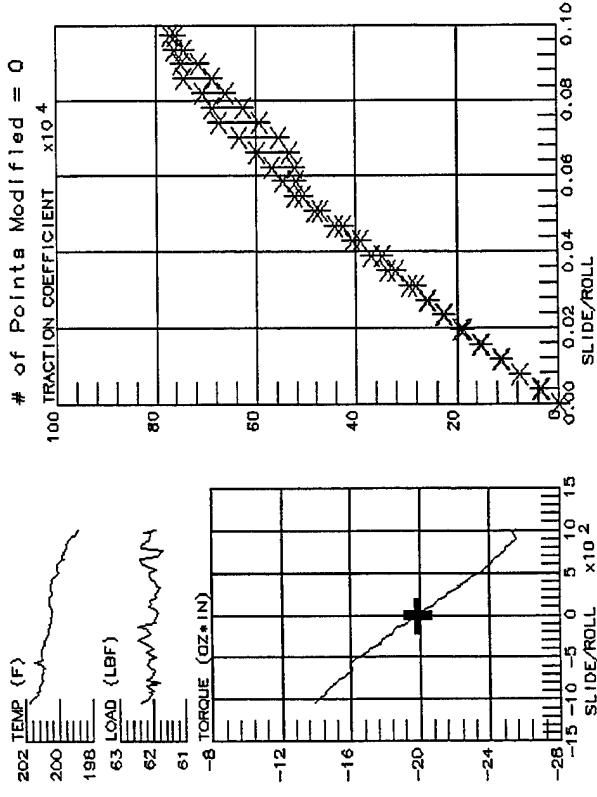
CP 90-715 ~300 Hatcol 3110 #149
200F 18LBF 5165RPM 5 FILE: cp200m



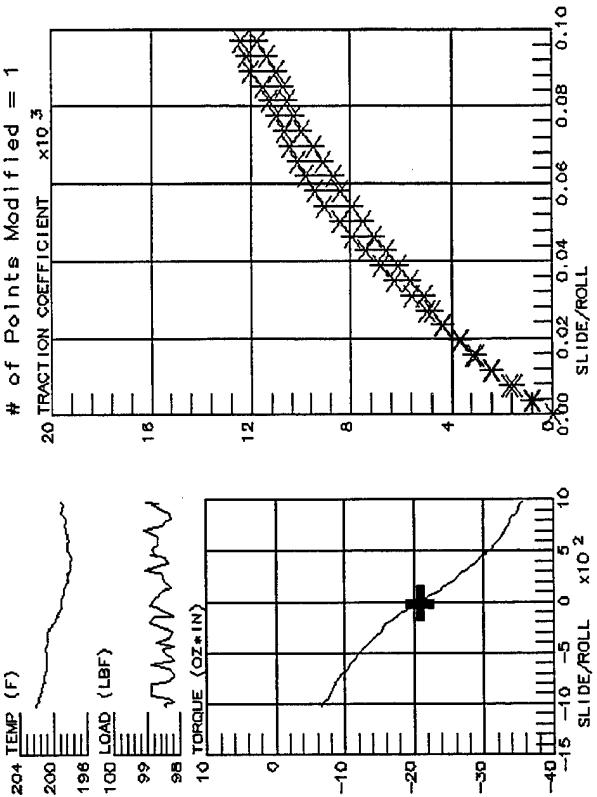
CP 90-715 ~300 Hatcol 3110 #150
200F 36LBF 5165RPM 8 FILE: op200m



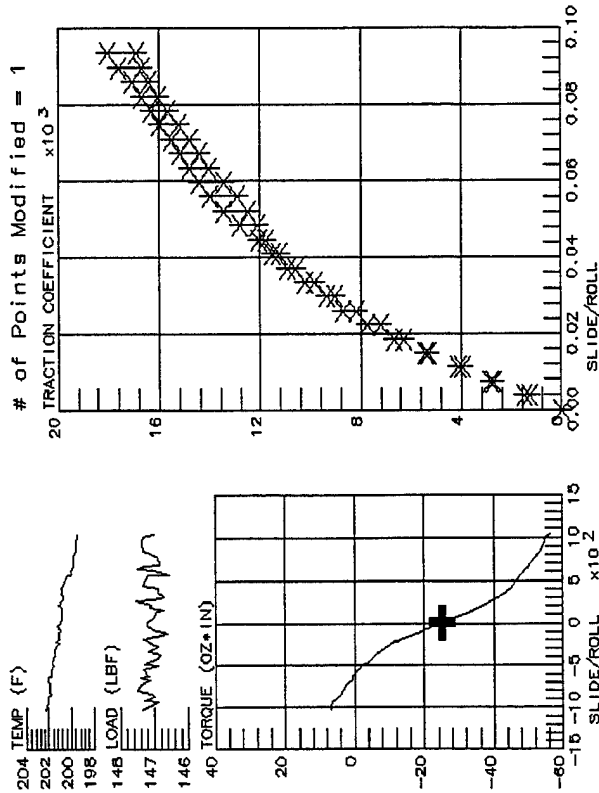
CP 90-715 ~300 Hatcol 3110 #151
200F 62LBF 5165RPM 7 FILE: cp200m



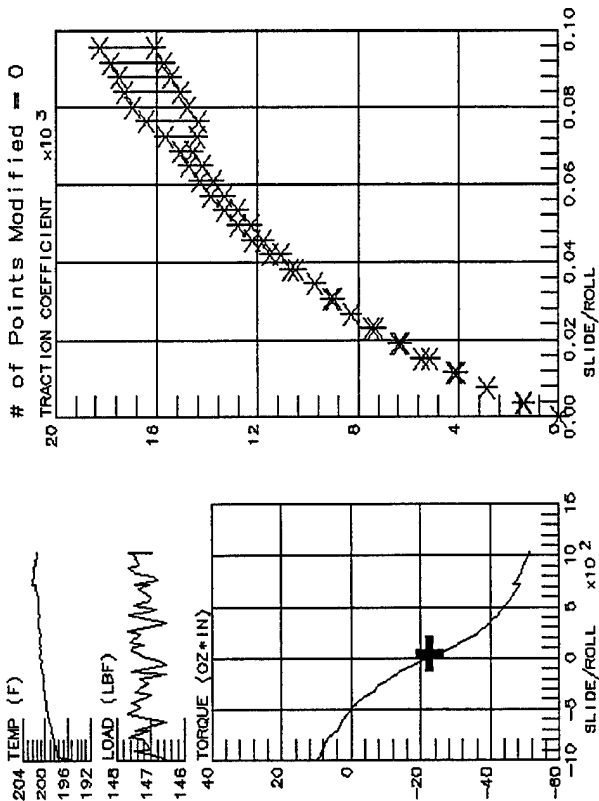
CP 90-715 ~300 Hatcol 3110 #152
200F 99LBF 5165RPM 8 FILE: cp200m



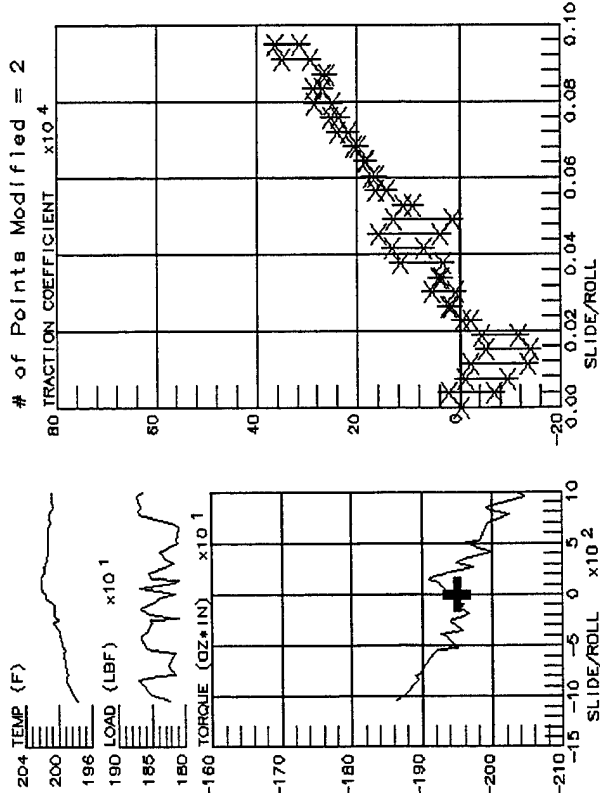
CP 90-715 ~300 Hatcol 3110 #153
200F 147LBF 2603RPM 1 FILE: cp200mx



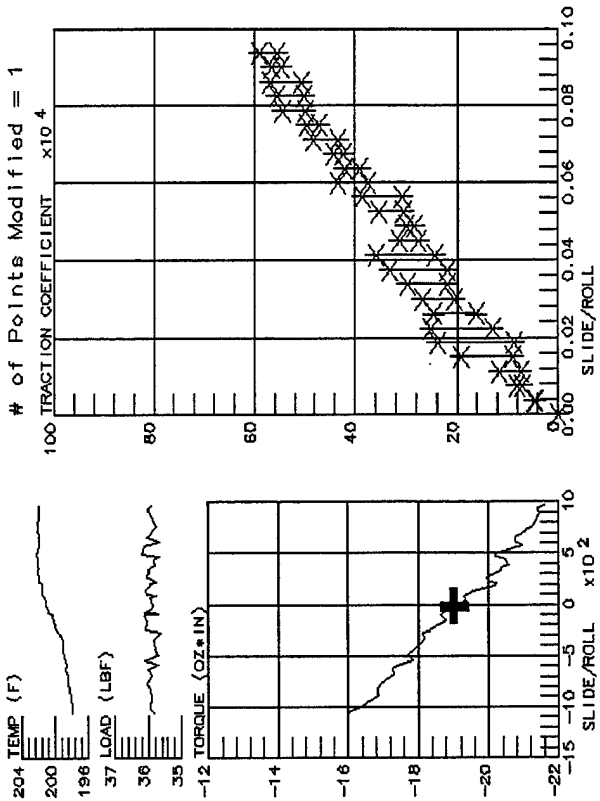
CP 90-715 ~300 Hatcol 3110 #154
200F 147LBF 6165RPM 2 FILE: cp200mx



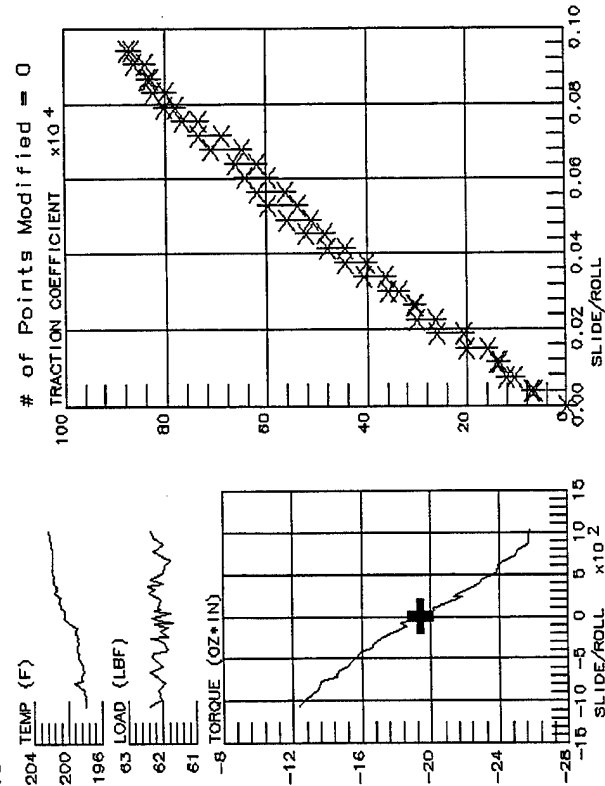
CP 90-715 ~300 Hatcol 3110 #155
200F 18LBF 7770RPM 1 FILE: cp200h



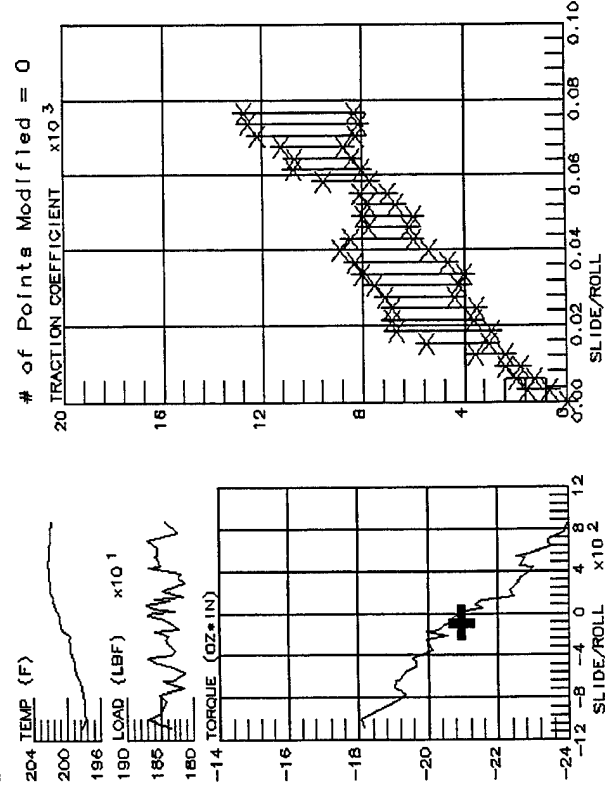
CP 90-715 ~300 Hatcol 3110 #156
200F 36LBF 7770RPM 2 FILE: cp200h



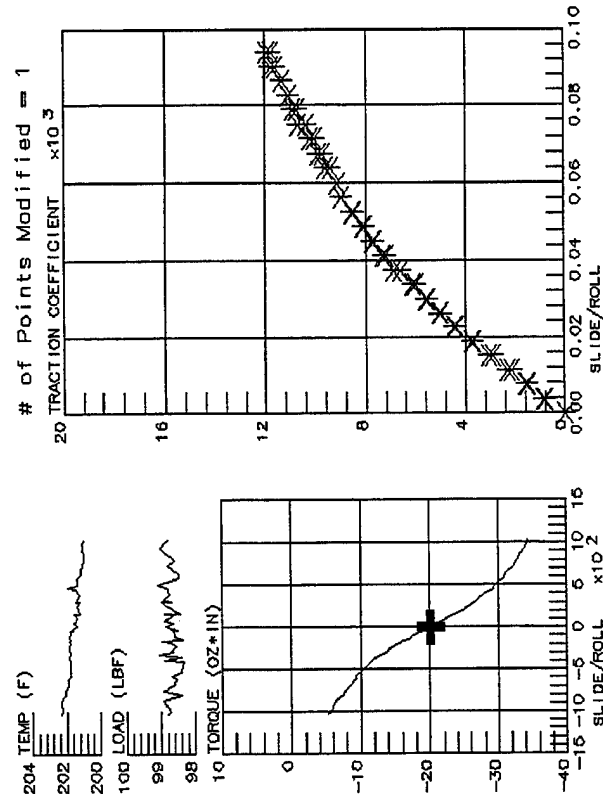
CP 90-715 ~300 Hatcol 3110 #157
200F 62LBF 7770RPM 3 FILE: cp200h



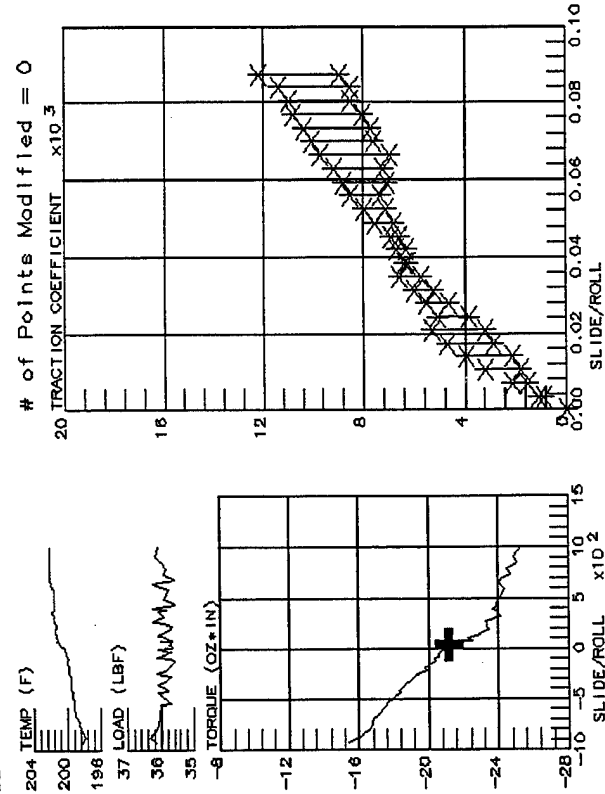
CP 90-715 ~300 Hatcol 3110 #159
200F 18LBF 10370RPM 5 FILE: cp200h



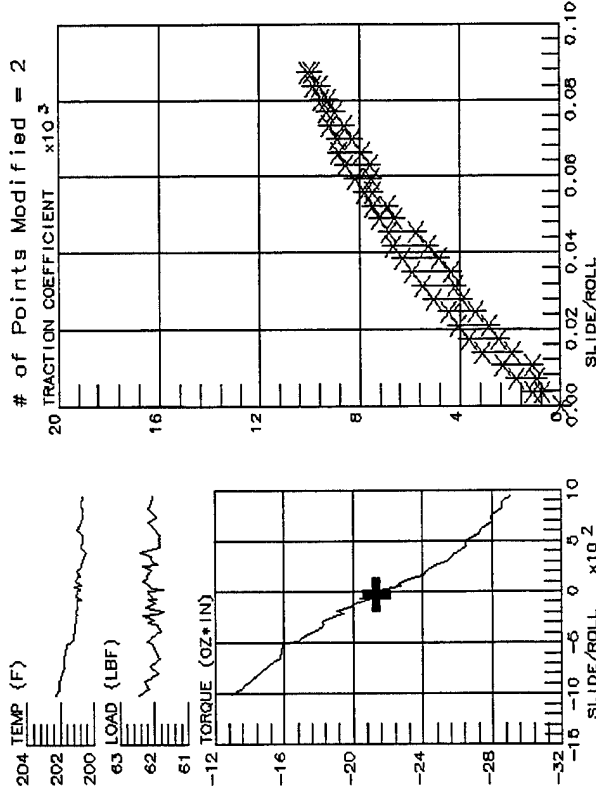
CP 90-715 ~300 Hatcol 3110 #158
200F 99LBF 7770RPM 4 FILE: cp200h



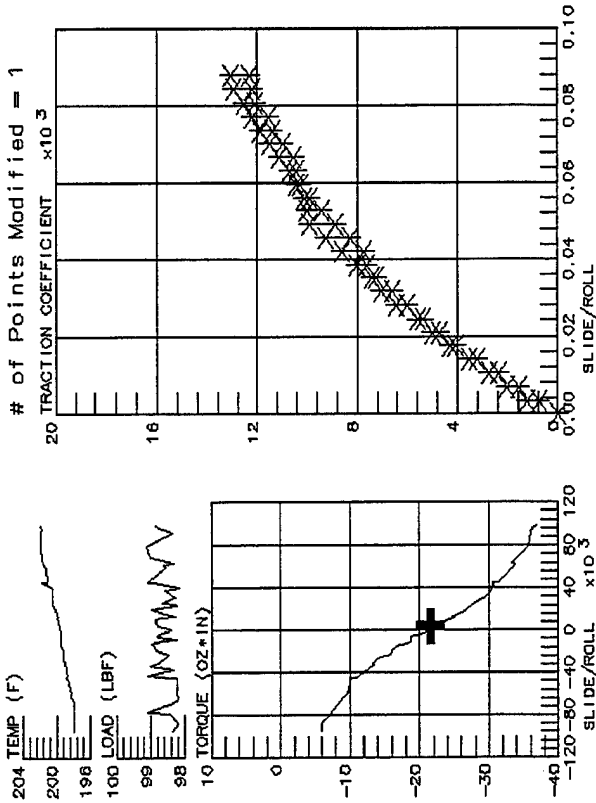
CP 90-715 ~300 Hatcol 3110 #160
200F 36LBF 10370RPM 8 FILE: cp200h



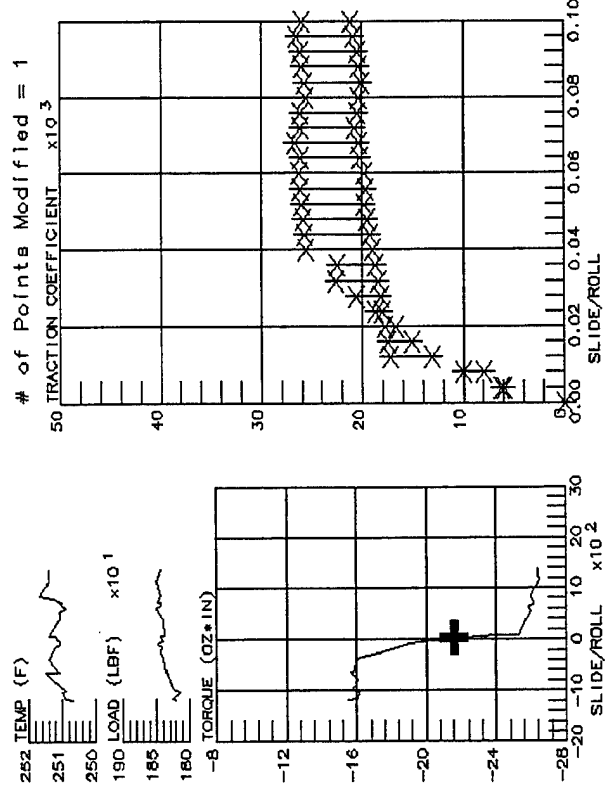
CP 90-715 ~300 Hatcol 3110 #161
200F 82LBF 10370RPM 7 FILE: cp200h



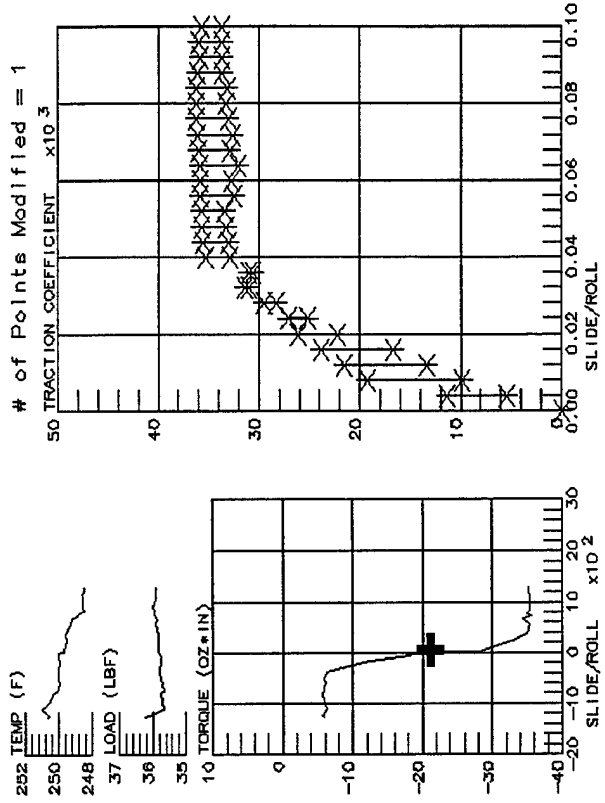
CP 90-715 ~300 Hatcol 3110 #162
200F 99LBF 10370RPM 8 FILE: cp200h



CP 90-715 ~300 Hatcol 3110 #163
250F 18LBF 310RPM 1 FILE: cp250i



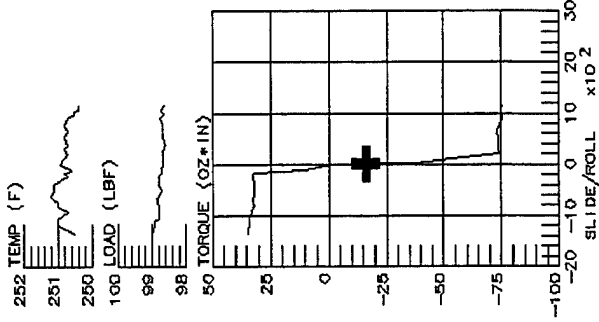
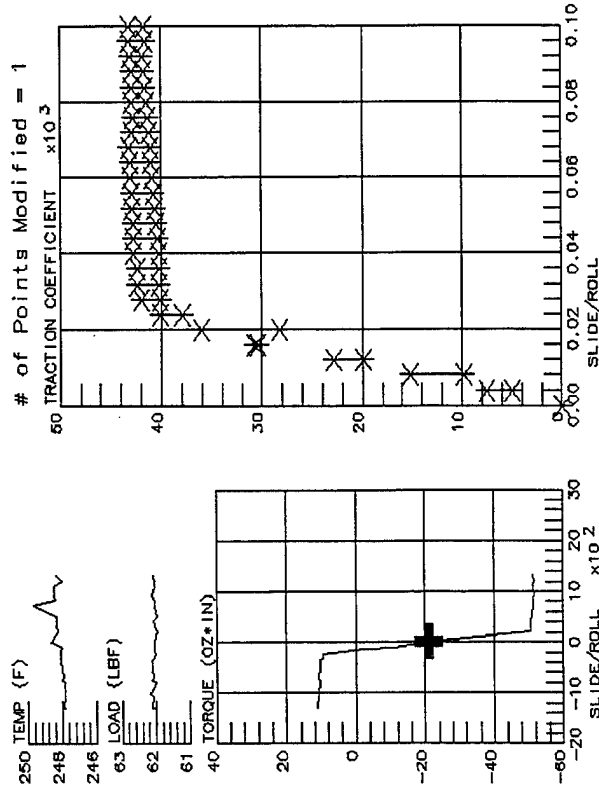
CP 90-715 ~300 Hatcol 3110 #164
250F 36LBF 310RPM 2 FILE: cp250i



CP 90-715 ~300 Hatcol 3110
250F 62LBF 310RPM 3 FILE: cp2501

#166

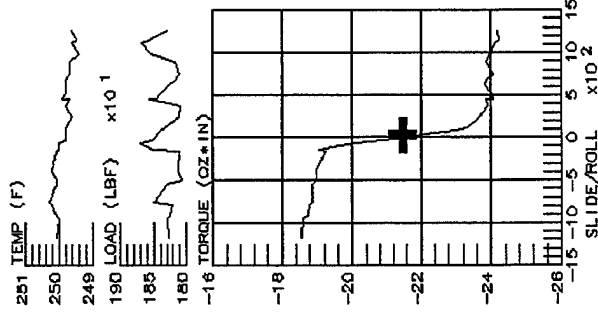
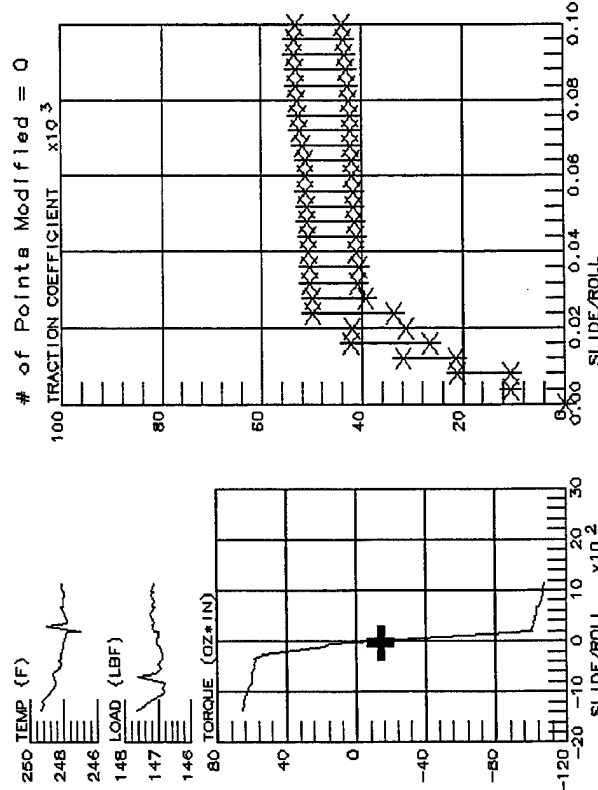
of Points Modified = 1



CP 90-715 ~300 Hatcol 3110
250F 147LBF 310RPM 5 FILE: cp2501

#167

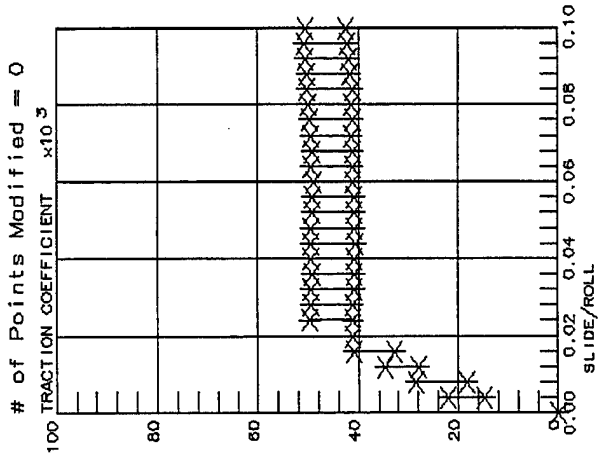
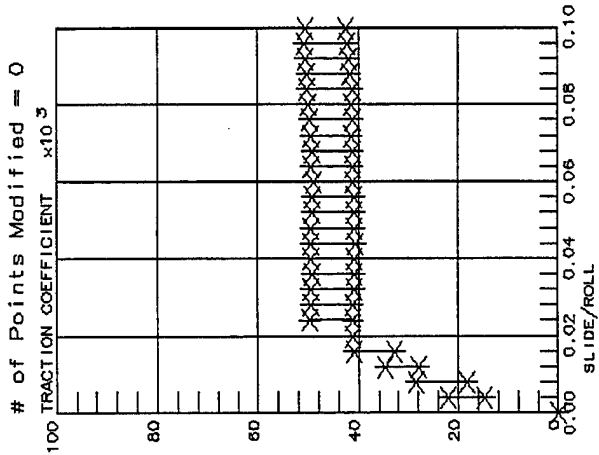
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
250F 99LBF 310RPM 4 FILE: cp2501

#168

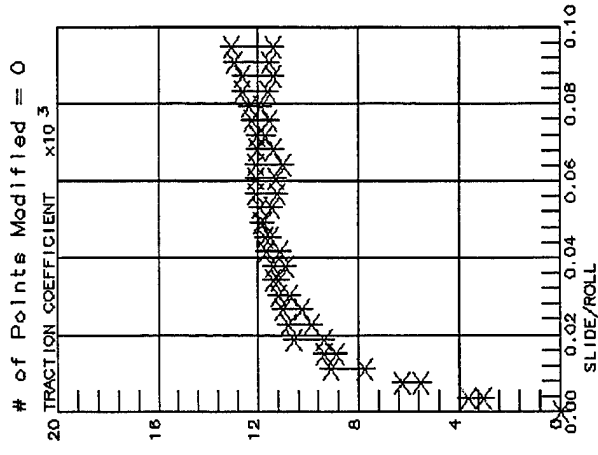
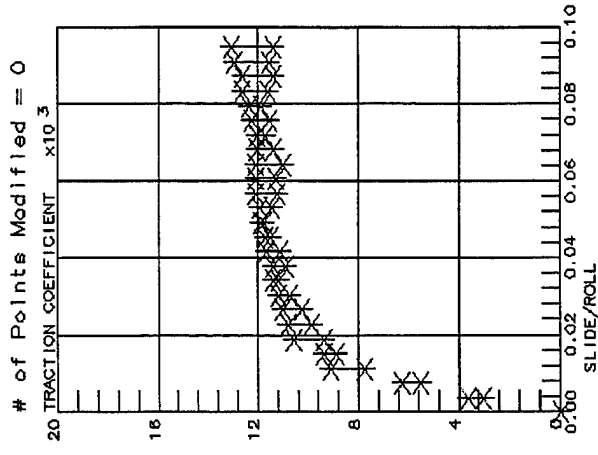
of Points Modified = 0



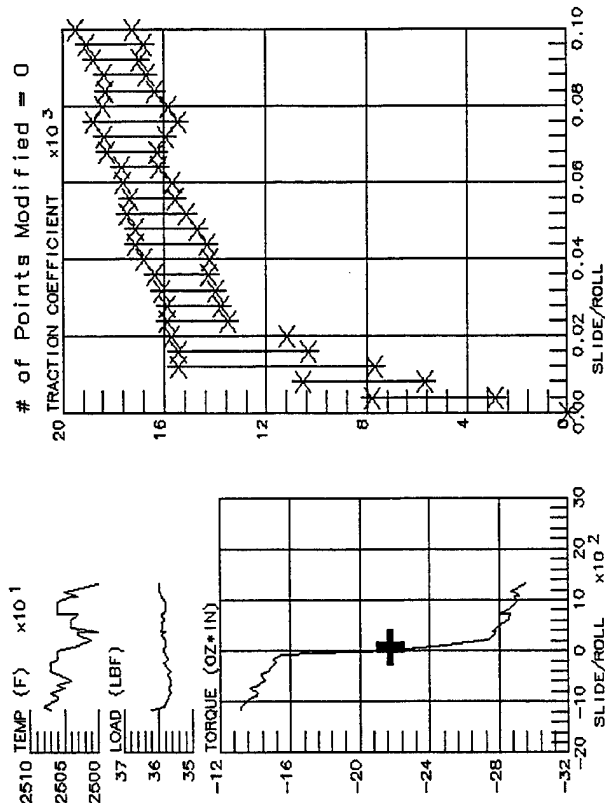
CP 90-715 ~300 Hatcol 3110
250F 18LBF 660RPM 8 FILE: cp2501

#168

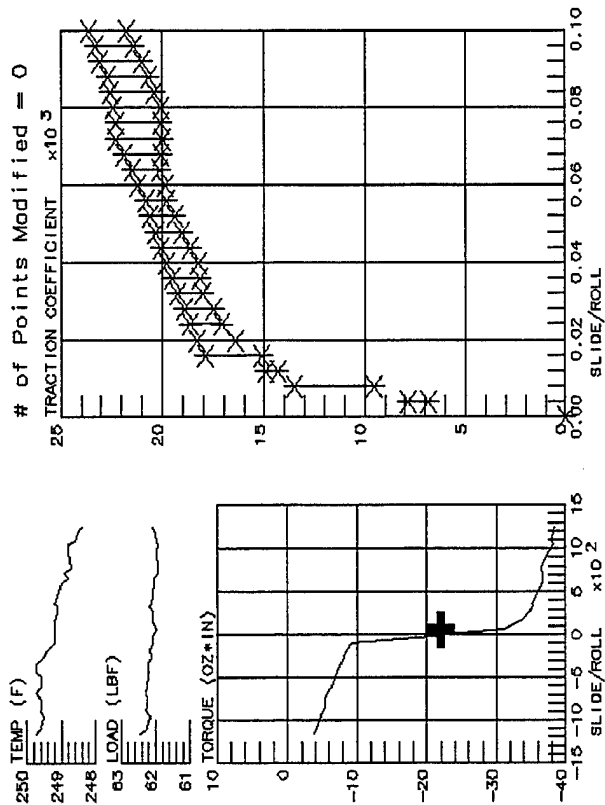
of Points Modified = 0



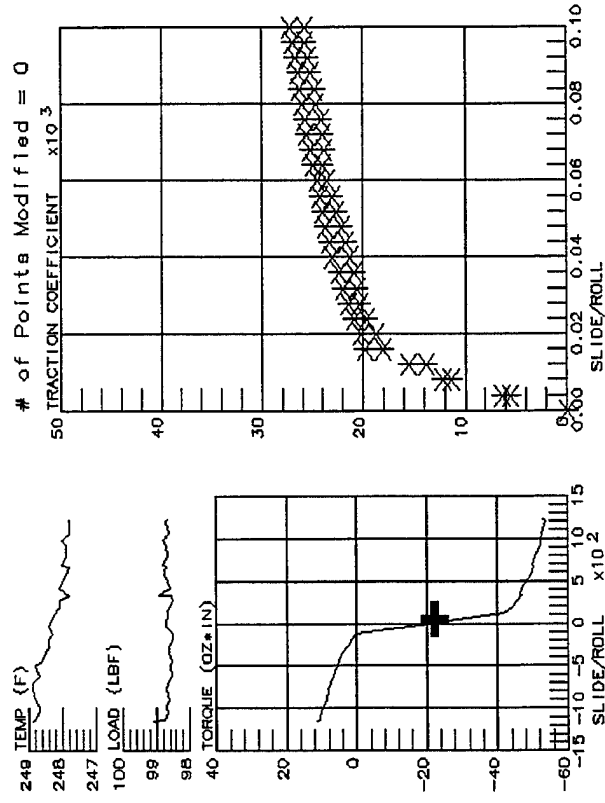
CP 90-715 ~300 Hatcol 3110 #169
250F 36LBF 660RPM 7 FILE: cp2501



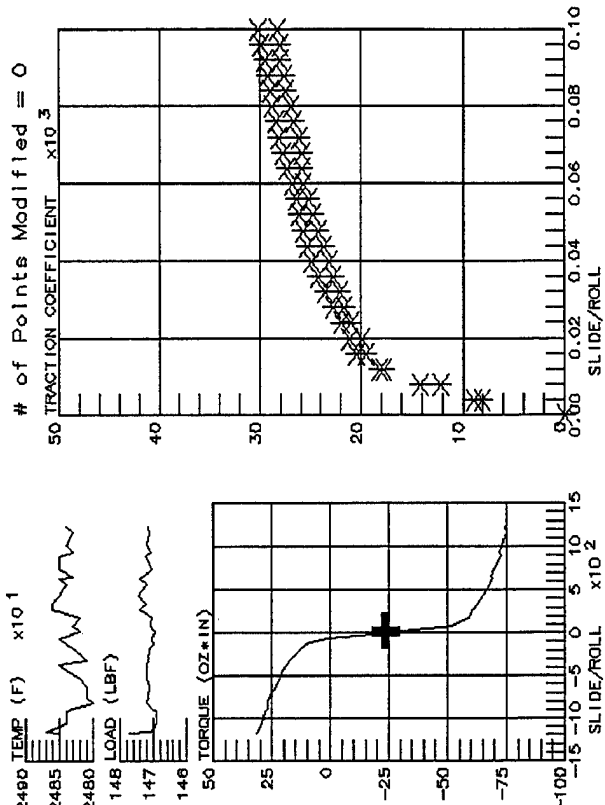
CP 90-715 ~300 Hatcol 3110 #170
250F 62LBF 660RPM 8 FILE: cp2501



CP 90-715 ~300 Hatcol 3110 #171
250F 99LBF 660RPM 9 FILE: cp2501

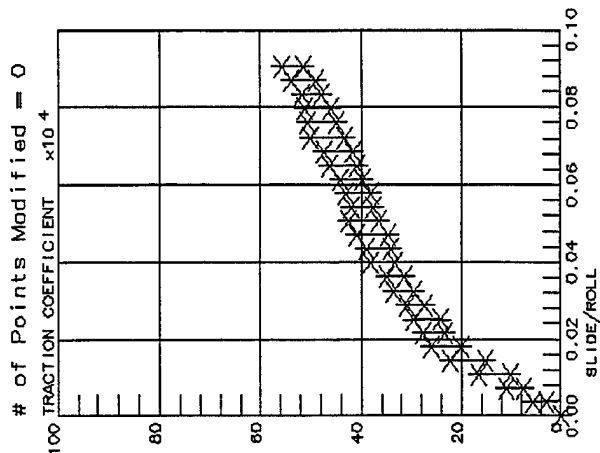
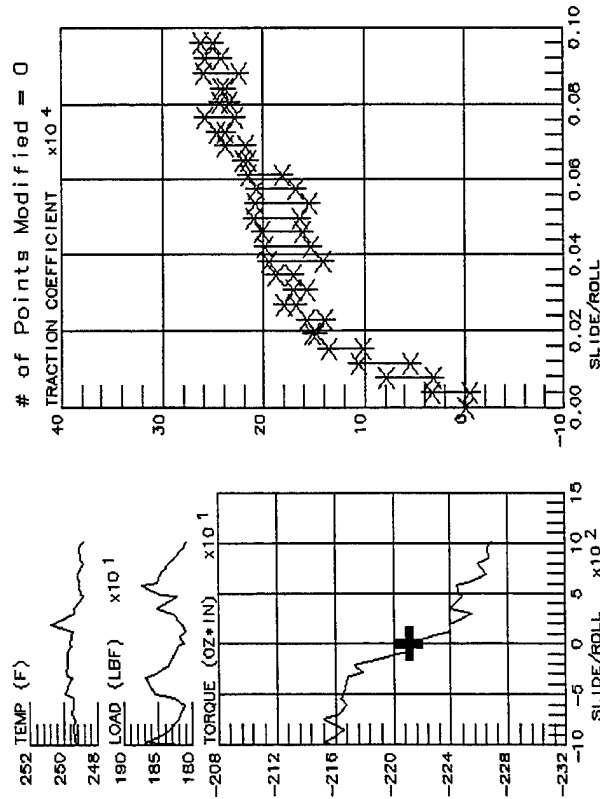


CP 90-715 ~300 Hatcol 3110 #172
250F 147LBF 660RPM 10 FILE: cp2501



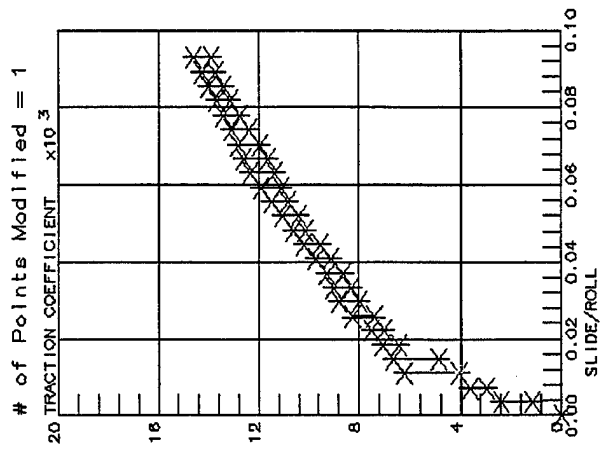
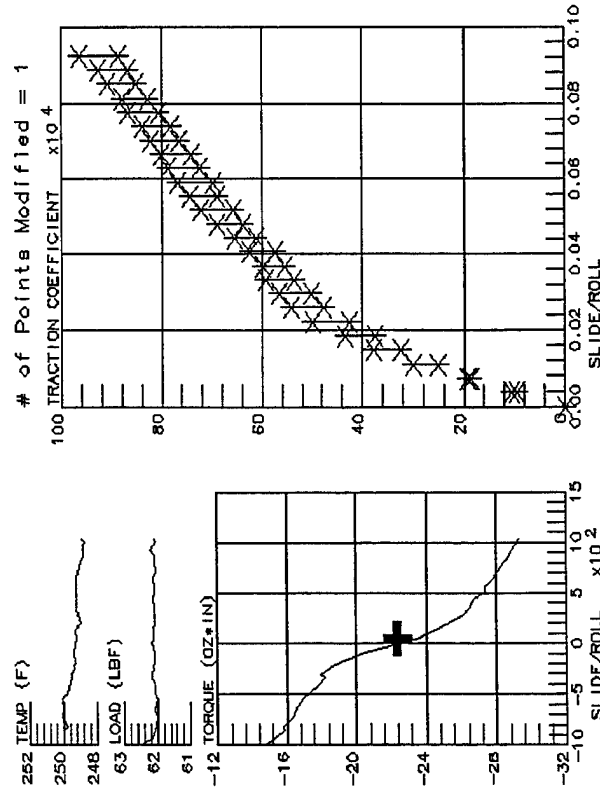
CP 90-715 ~300 Hatcol 3110
250F 18LBF 1280RPM 11 FILE: cp2501

#173
of Points Modified = 0

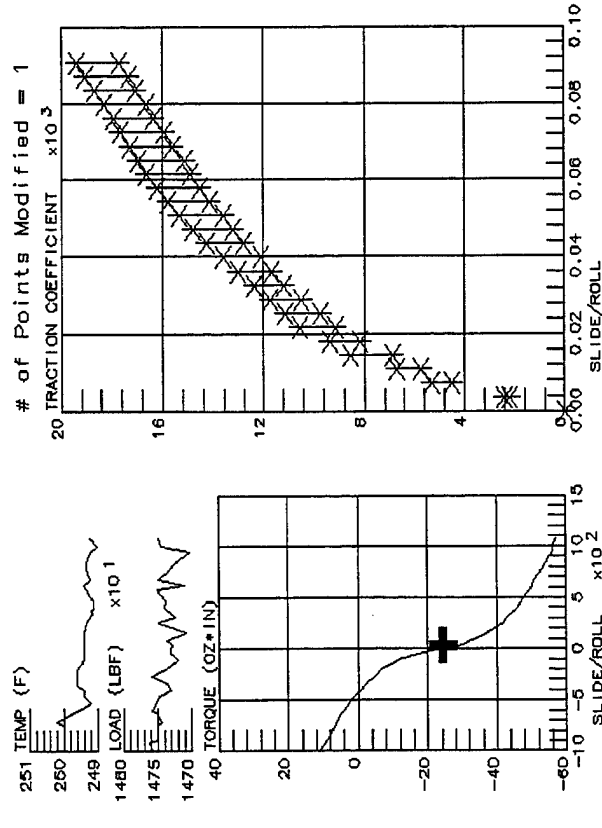


CP 90-715 ~300 Hatcol 3110
250F 62LBF 1280RPM 13 FILE: cp2501

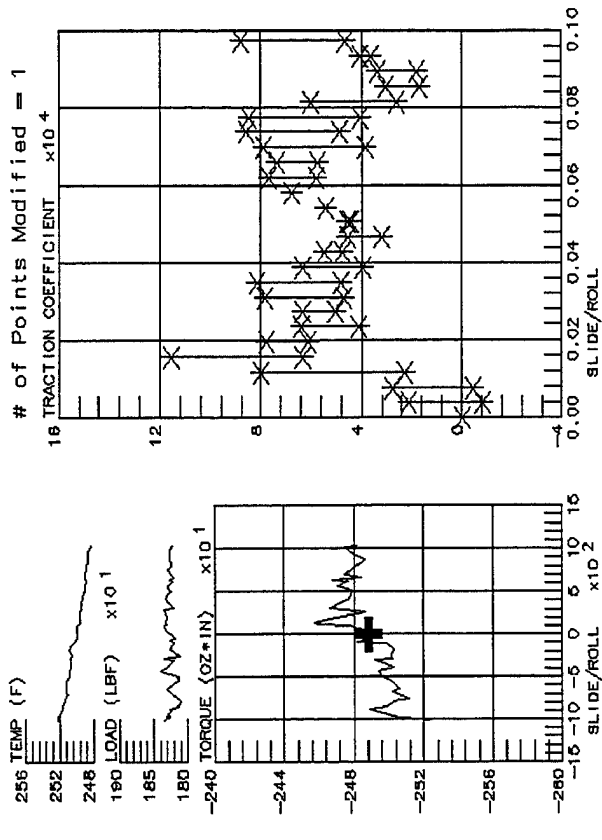
#175
of Points Modified = 1



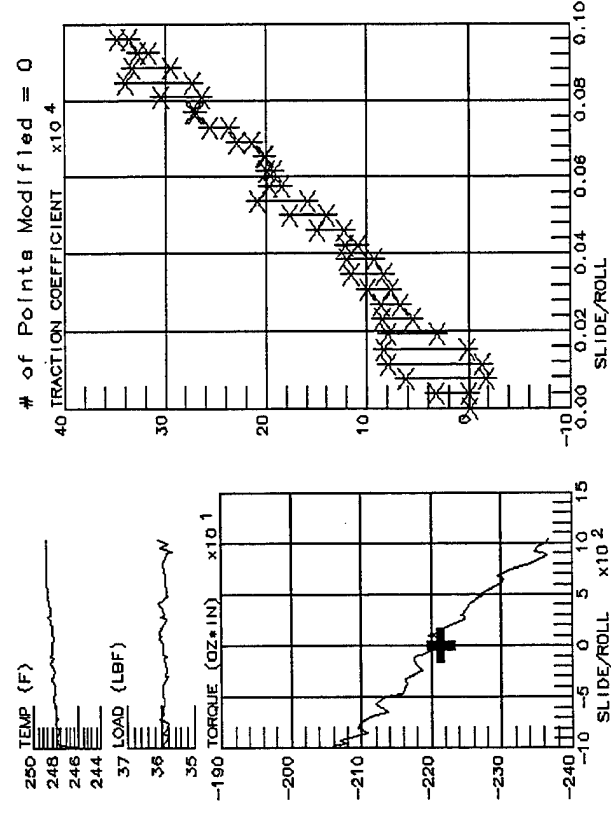
CP 90-715 ~300 Hatcol 3110 #177
250F 147LBF 1280RPM 15 FILE: cp2501



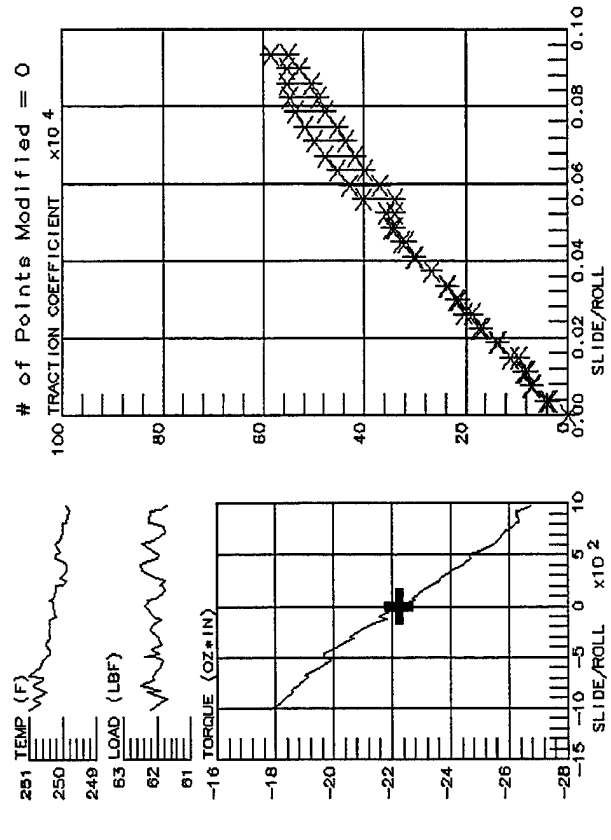
CP 90-715 ~300 Hatcol 3110 #178
250F 18LBF 2603RPM 1 FILE: cp250m



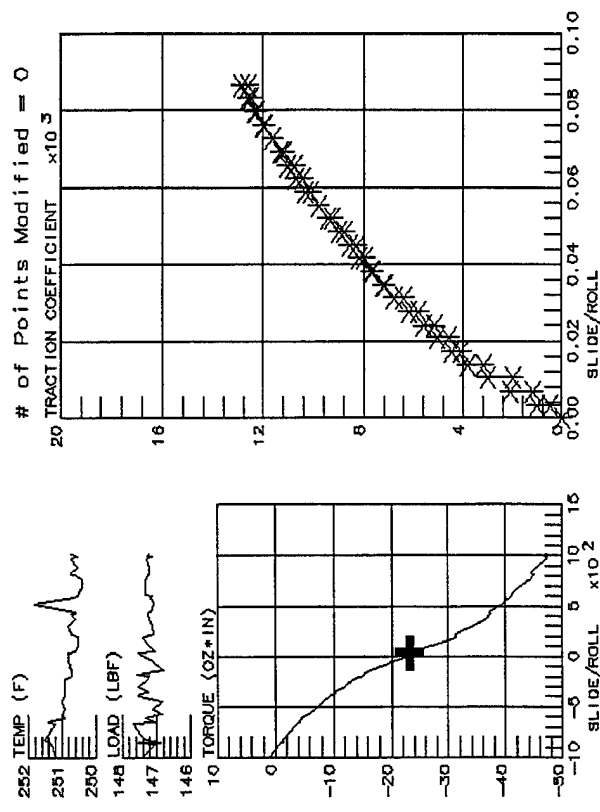
CP 90-715 ~300 Hatcol 3110 #179
250F 36LBF 2603RPM 2 FILE: cp250m



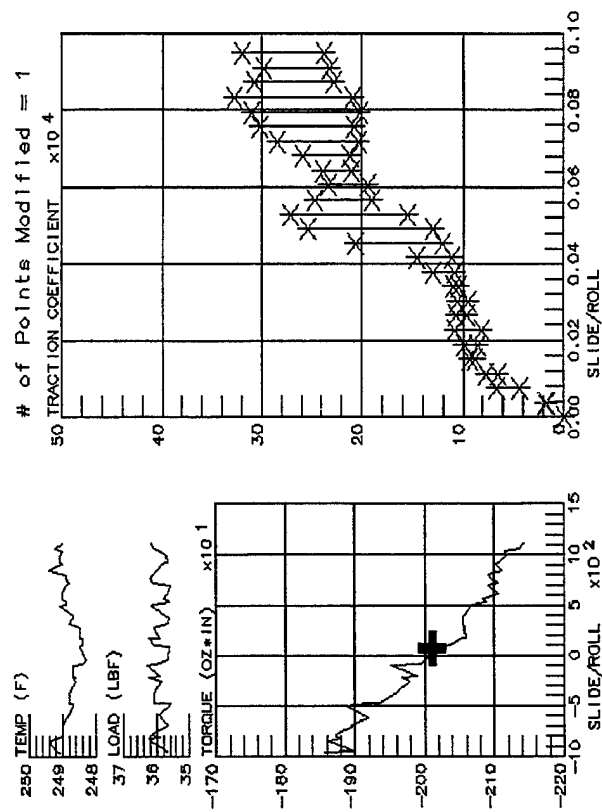
CP 90-715 ~300 Hatcol 3110 #180
250F 62LBF 2603RPM 3 FILE: cp250m



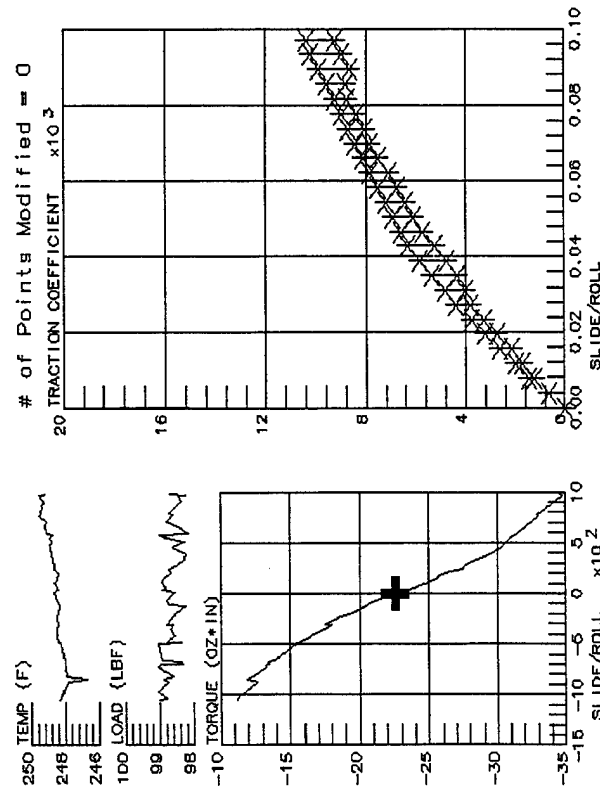
CP 90-715 ~300 Hatcol 3110 #182
250F 147LBF 2603RPM 5 FILE: cp250m



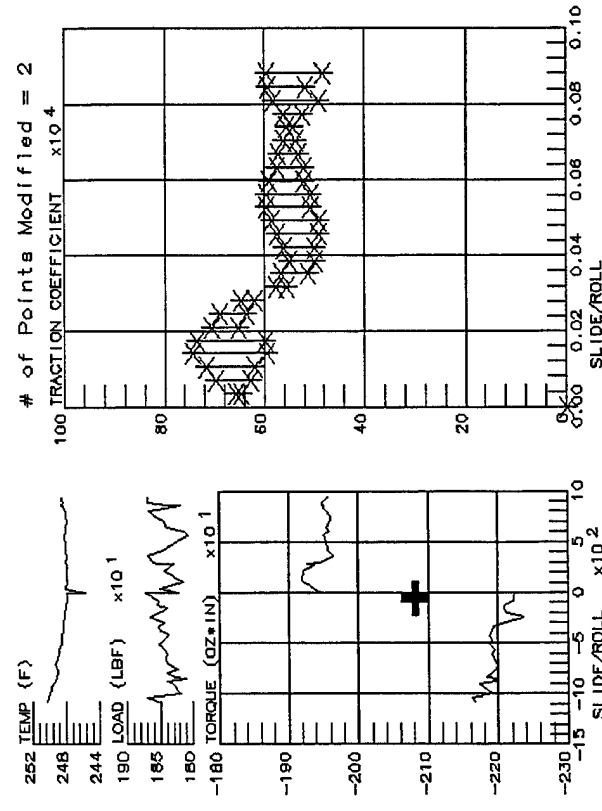
CP 90-715 ~300 Hatcol 3110 #184
250F 36LBF 5165RPM 7 FILE: cp250m



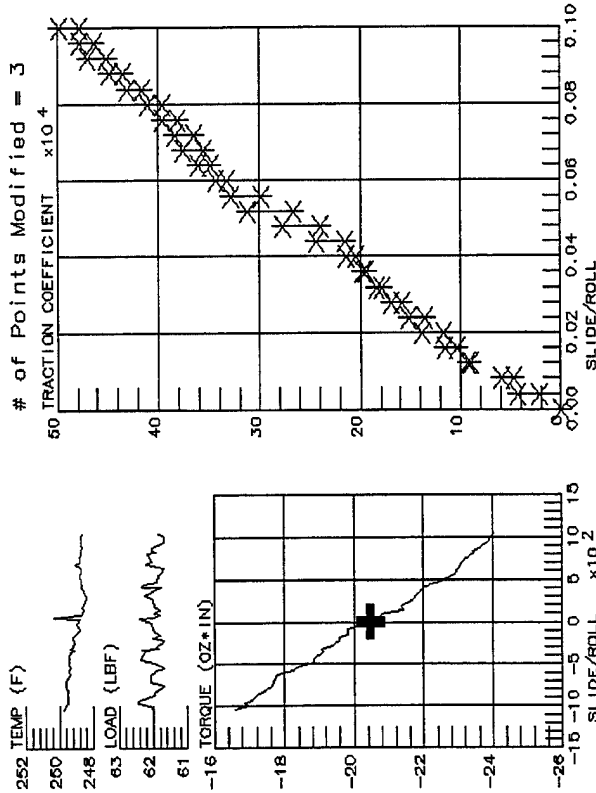
CP 90-715 ~300 Hatcol 3110 #181
250F 99LBF 2603RPM 4 FILE: cp250m



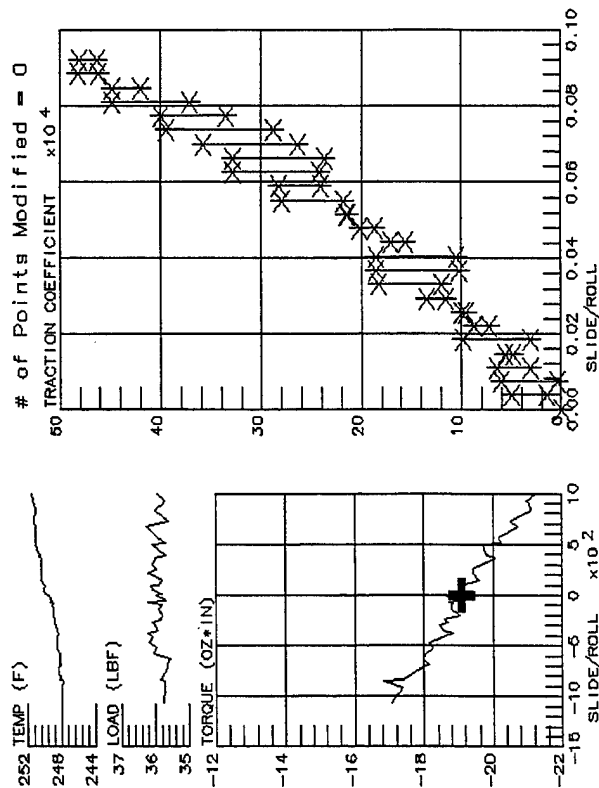
CP 90-715 ~300 Hatcol 3110 #183
250F 18LBF 5165RPM 6 FILE: cp250m



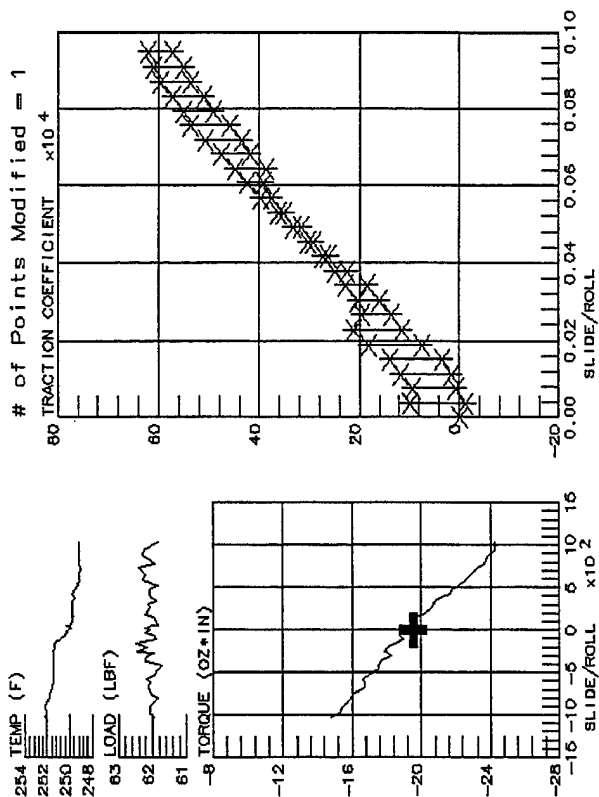
CP 90-715 ~300 Hatcol 3110 #185
250F 82LBF 5165RPM 8 FILE: cp250m



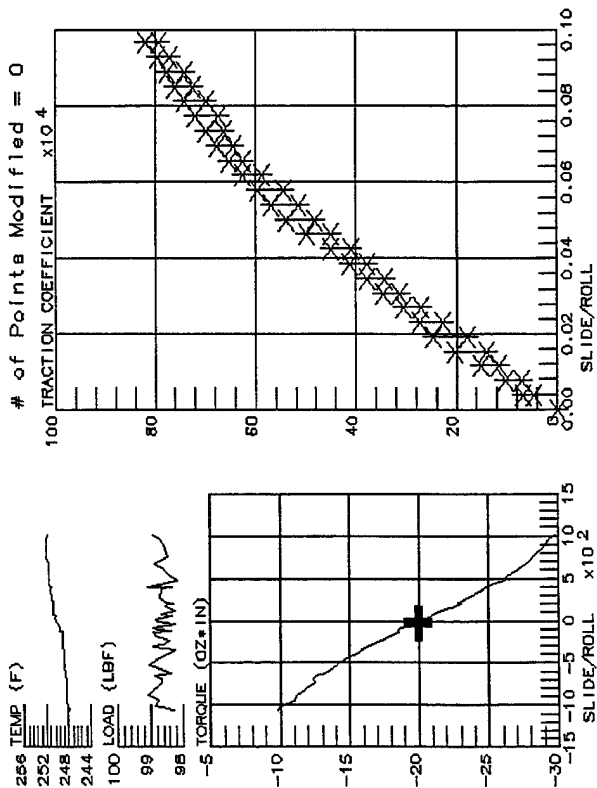
CP 90-715 ~300 Hatcol 3110 #189
250F 36LBF 7770RPM 2 FILE: cp250h



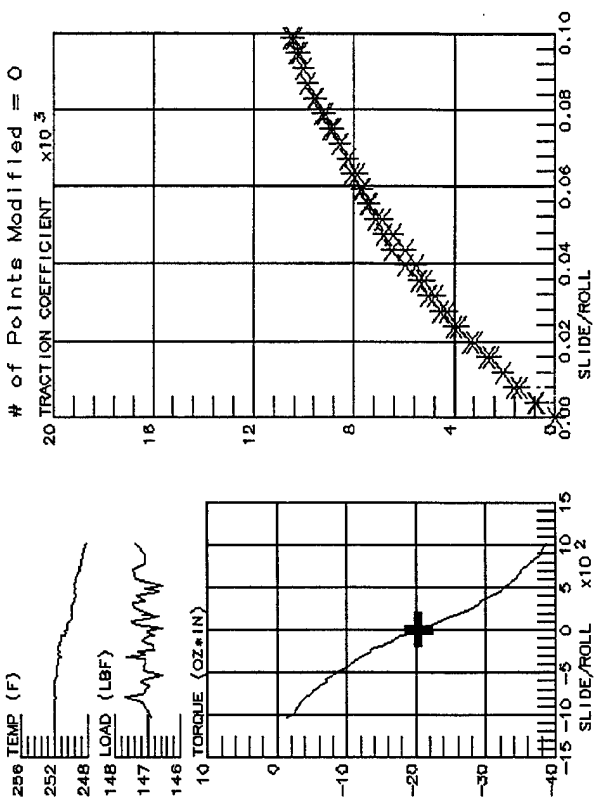
CP 90-715 ~300 Hatcol 3110 #190
250F 62LBF 7770RPM 3 FILE: cp250h



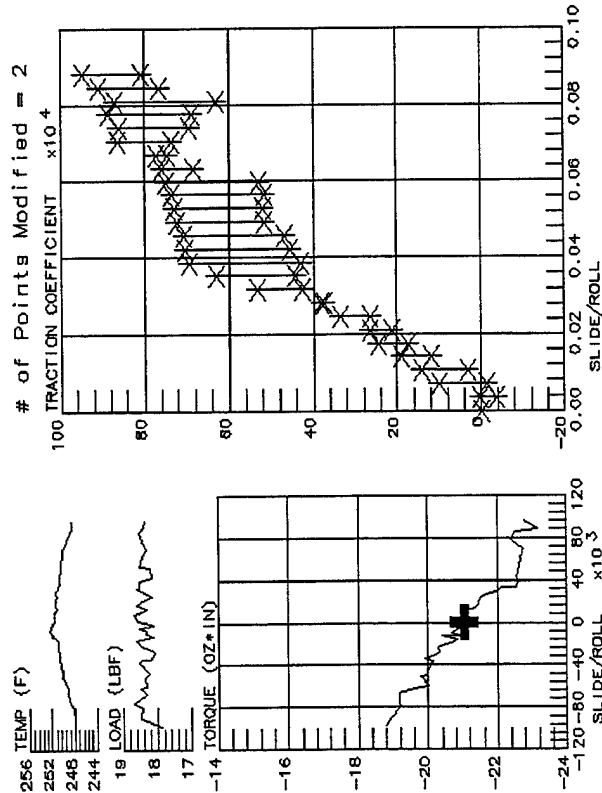
CP 90-715 ~300 Hatcol 3110 #191
250F 99LBF 7770RPM 4 FILE: cp250h



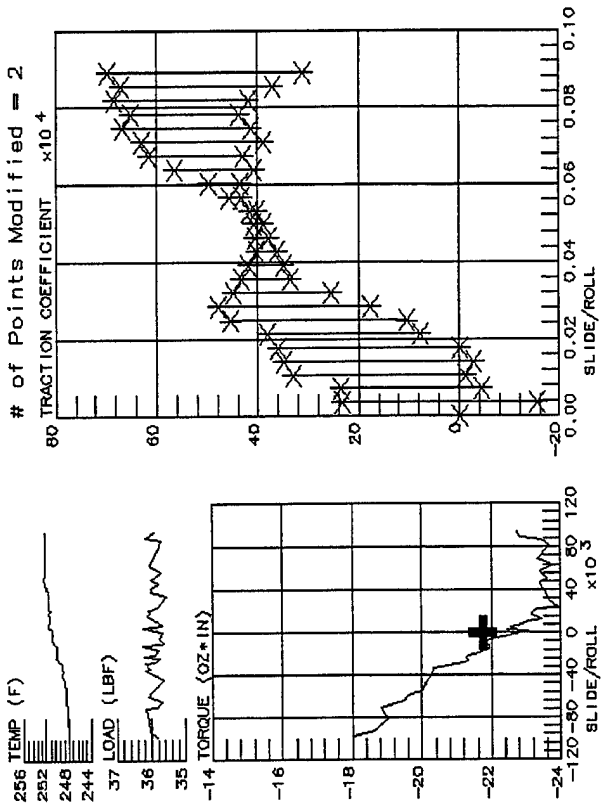
CP 90-715 ~300 Hatcol 3110 #192
250F 147LBF 7770RPM 5 FILE: cp250h



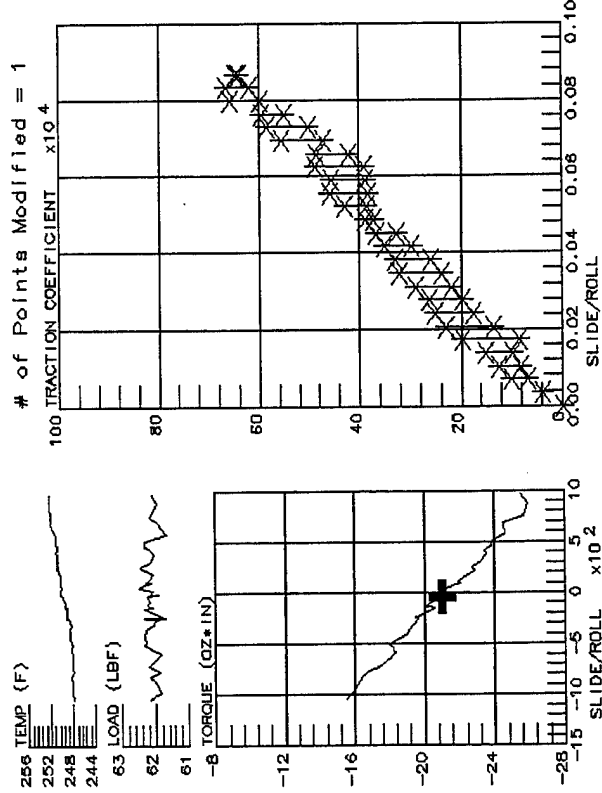
CP 90-715 ~300 Hatcol 3110 #193
250F 16LBF 10370RPM 8 FILE: cp250h



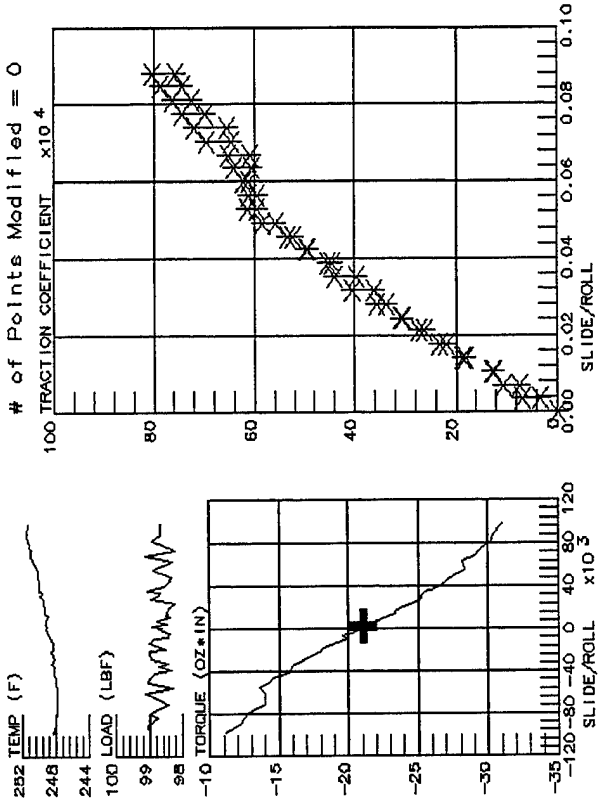
CP 90-715 ~300 Hatcol 3110 #194
250F 36LBF 10370RPM 7 FILE: cp250h



CP 90-715 ~300 Hatcol 3110 #195
250F 62LBF 10370RPM 8 FILE: cp250h



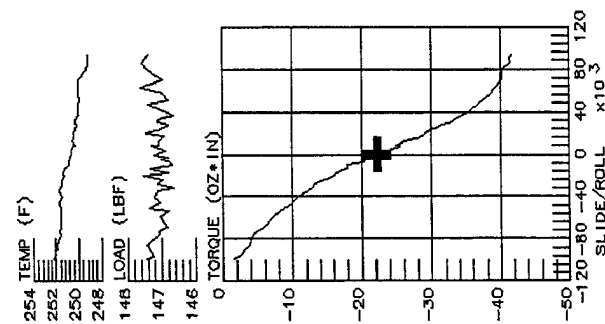
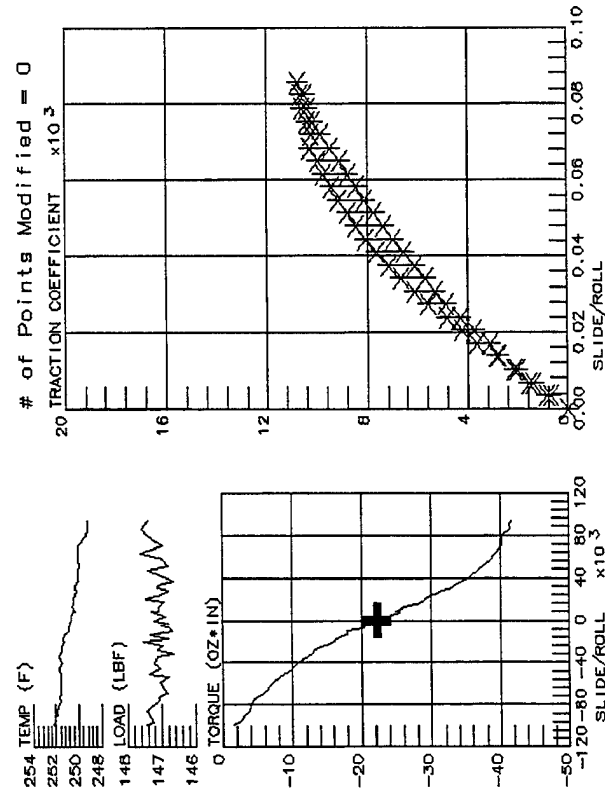
CP 90-715 ~300 Hatcol 3110 #196
250F 99LBF 10370RPM 9 FILE: cp250h



CP 90-715 ~300 Hatcool 3110
250F 147LBF 10370RPM 10 FILE: op250h

#197

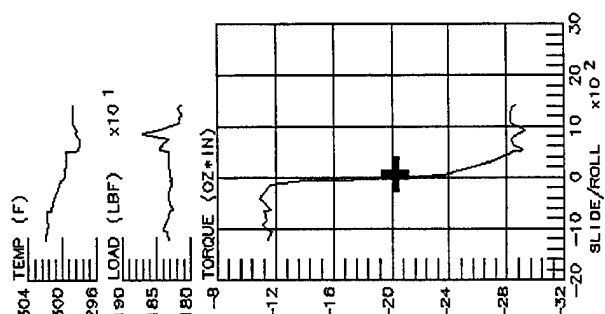
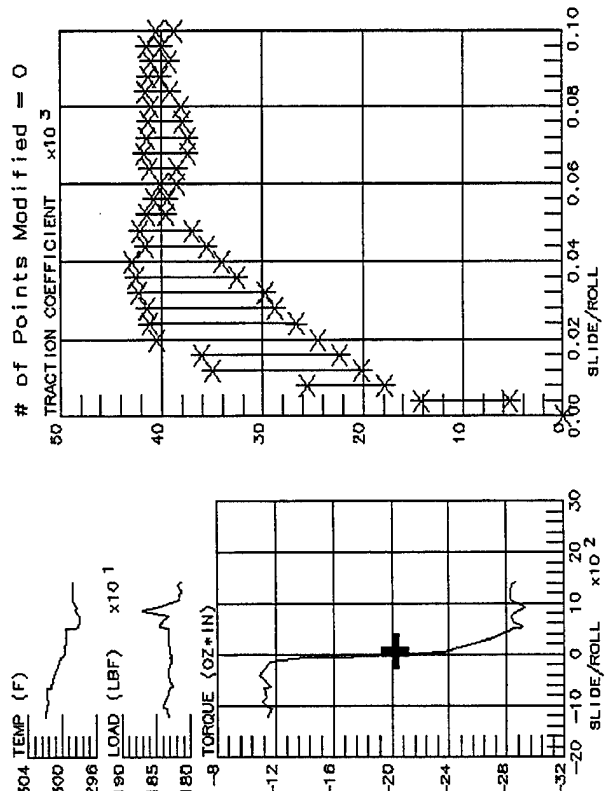
of Points Modified = 0



CP 90-715 ~300 Hatcool 3110
300F 18LBF 310RPM 1 FILE: op300l

#198

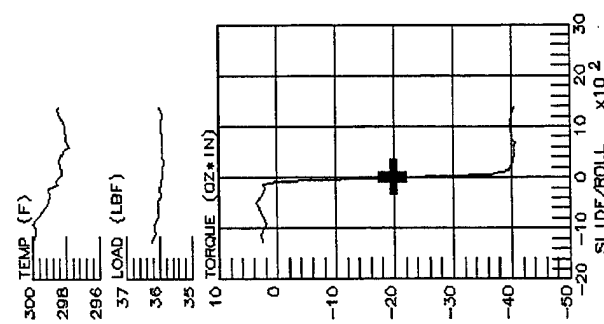
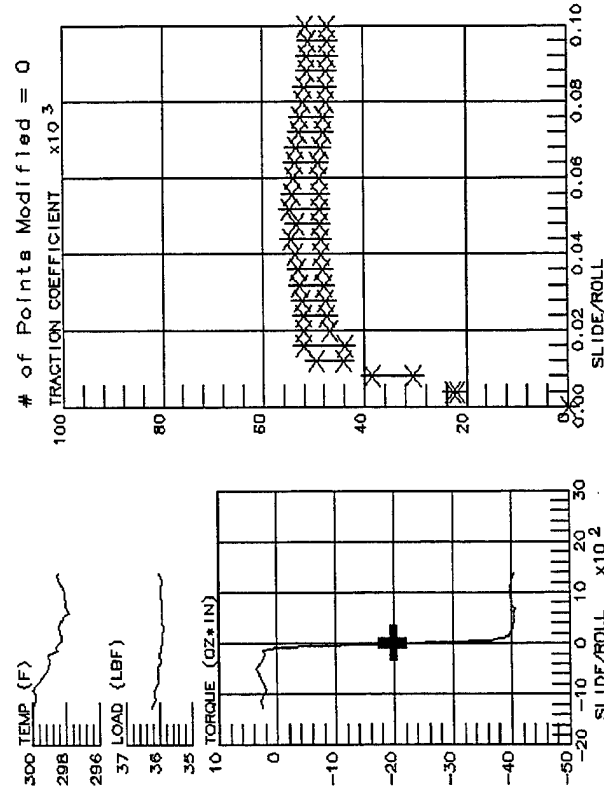
of Points Modified = 0



CP 90-715 ~300 Hatcool 3110
300F 36LBF 310RPM 2 FILE: cp300l

#199

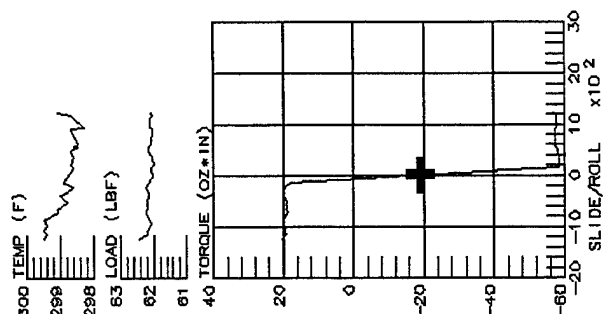
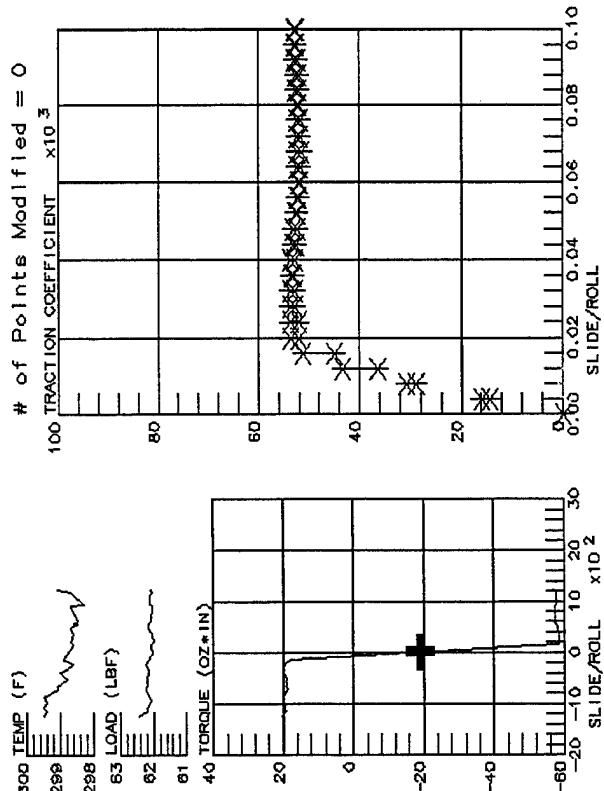
of Points Modified = 0



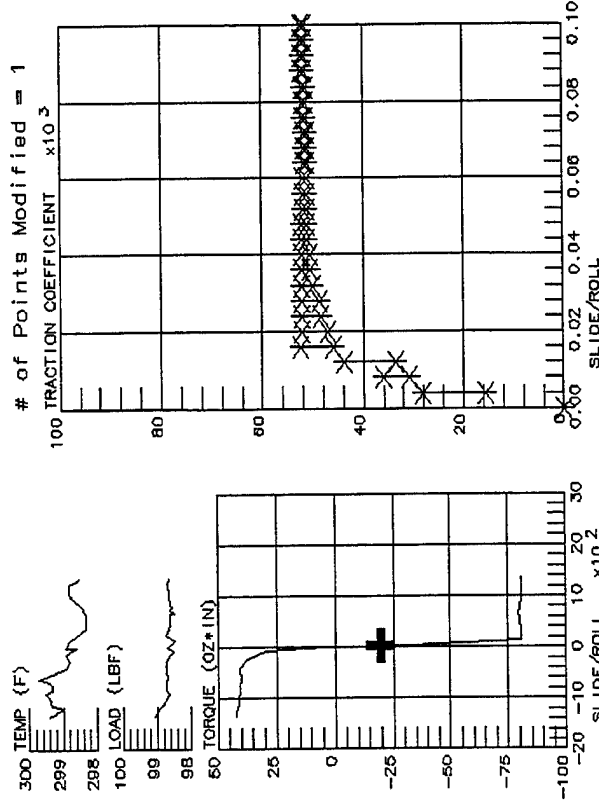
CP 90-715 ~300 Hatcool 3110
300F 62LBF 310RPM 3 FILE: cp300l

#200

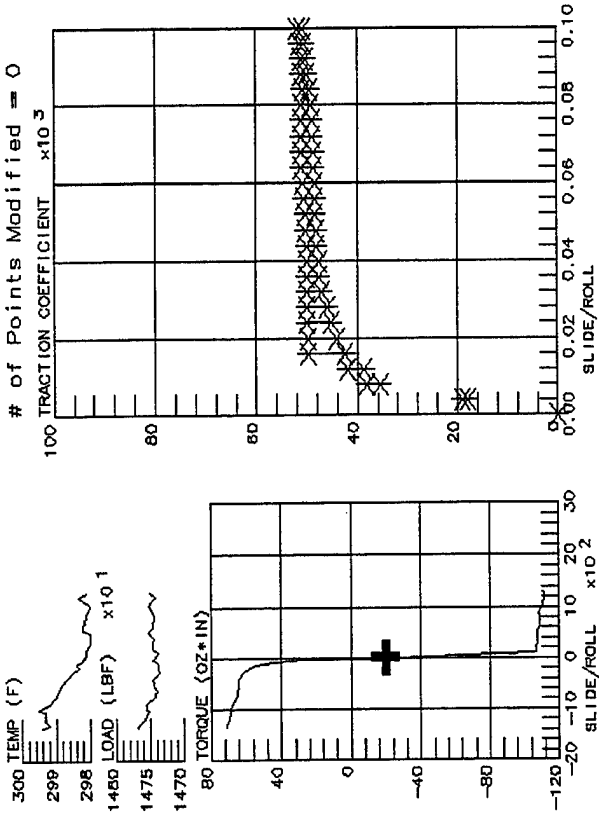
of Points Modified = 0



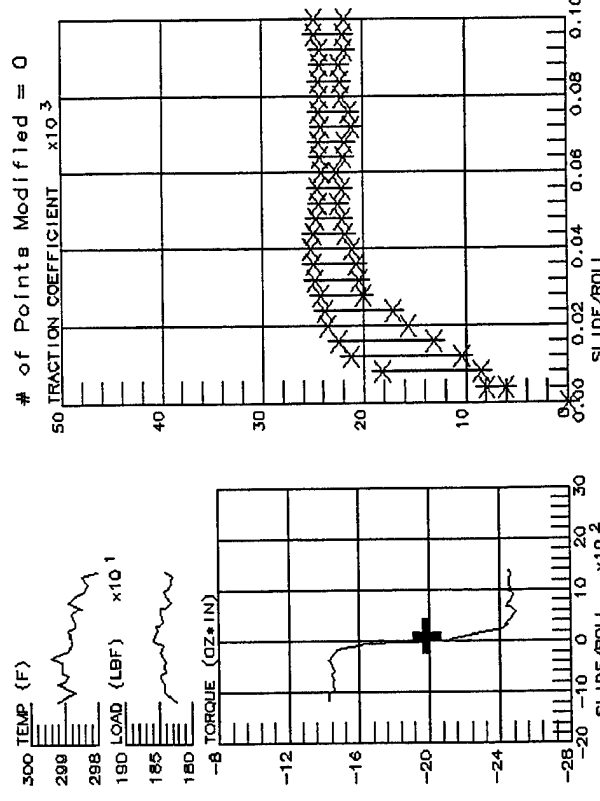
CP 90-715 ~300 Hatcol 3110 #201
300F 99LBF 310RPM 4 FILE: cp3001



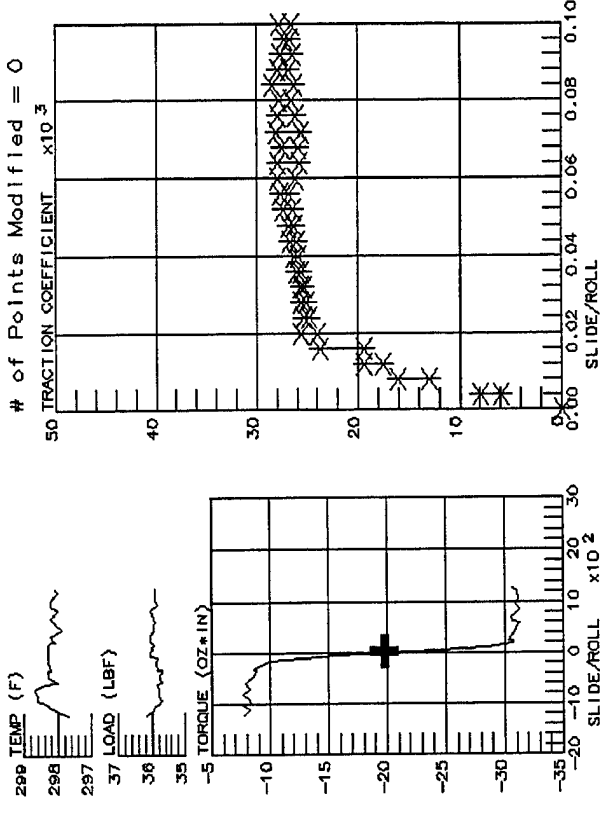
CP 90-715 ~300 Hatcol 3110 #202
300F 147LBF 310RPM 5 FILE: cp3001



CP 90-715 ~300 Hatcol 3110 #203
300F 18LBF 860RPM 6 FILE: cp3001



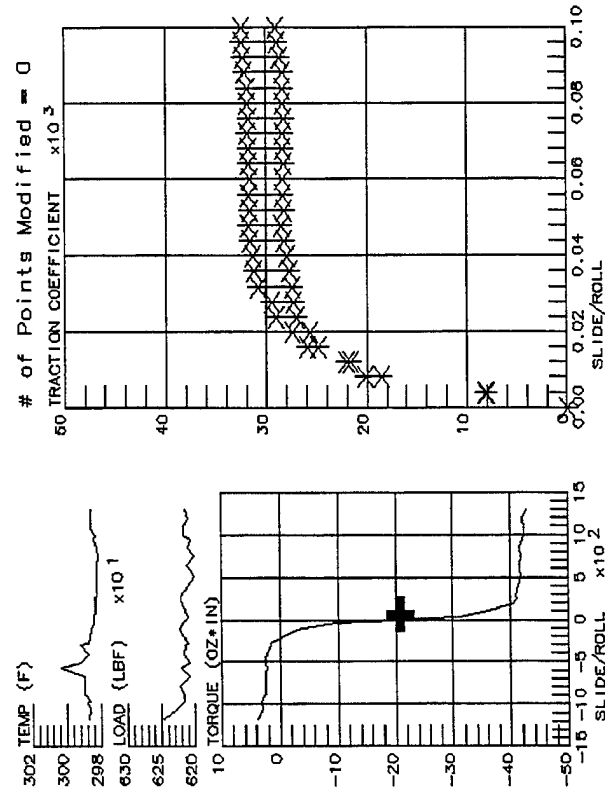
CP 90-715 ~300 Hatcol 3110 #204
300F 36LBF 660RPM 7 FILE: cp3001



CP 90-715 ~300 Hatool 3110
300F 62LBF 660RPM 8 FILE: cp3001

#206

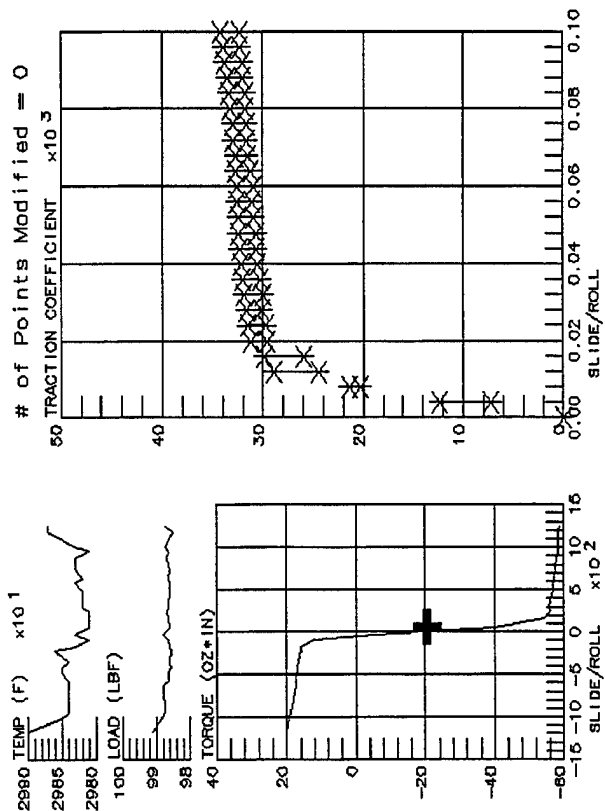
of Points Modified = 0



CP 90-715 ~300 Hatool 3110
300F 99LBF 660RPM 9 FILE: cp3001

#208

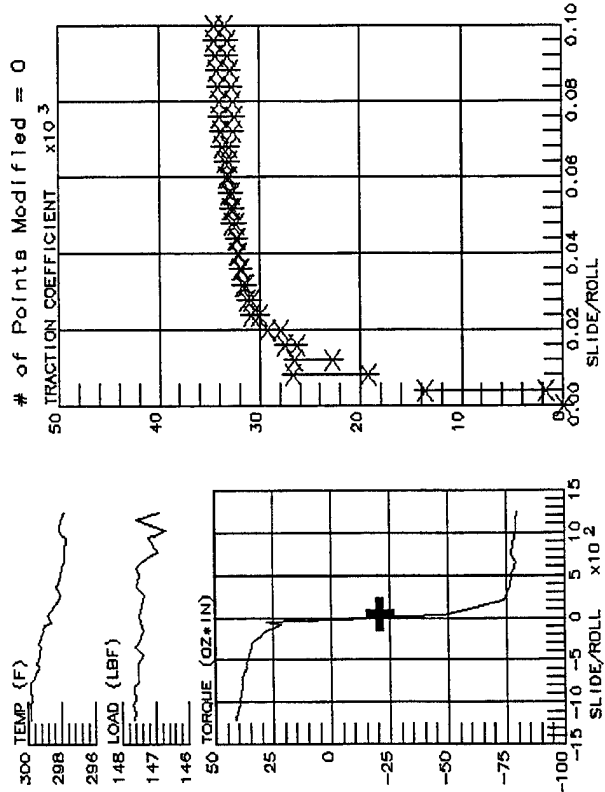
of Points Modified = 0



CP 90-715 ~300 Hatool 3110
300F 147LBF 660RPM 10 FILE: cp3001

#207

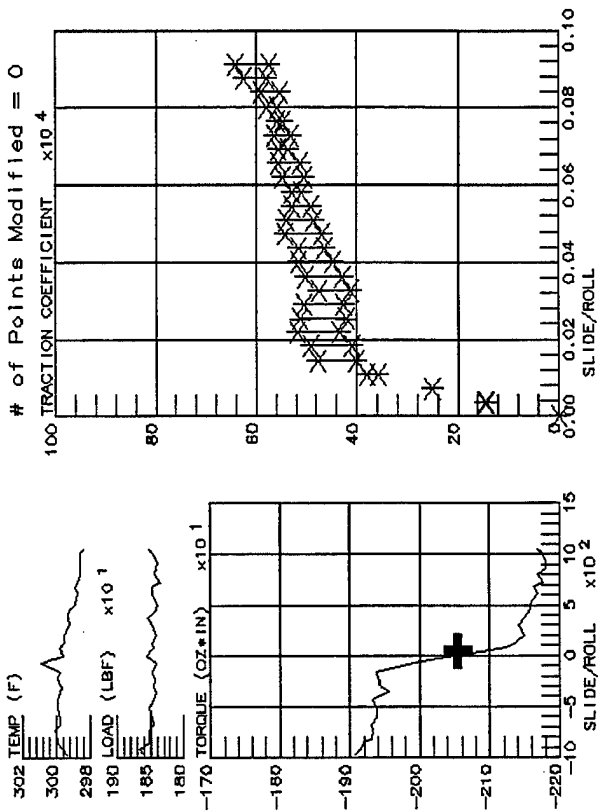
of Points Modified = 0



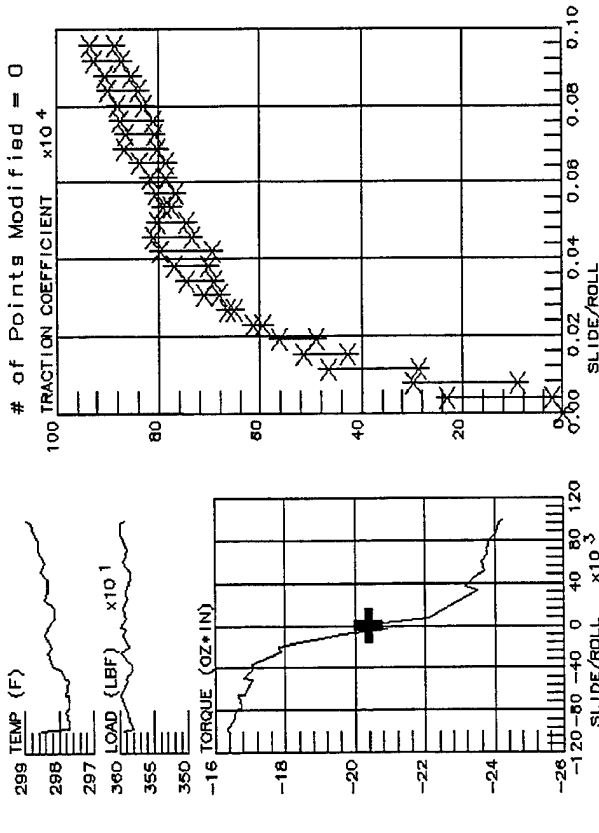
CP 90-715 ~300 Hatool 3110
300F 18LBF 1280RPM 11 FILE: cp3001

#208

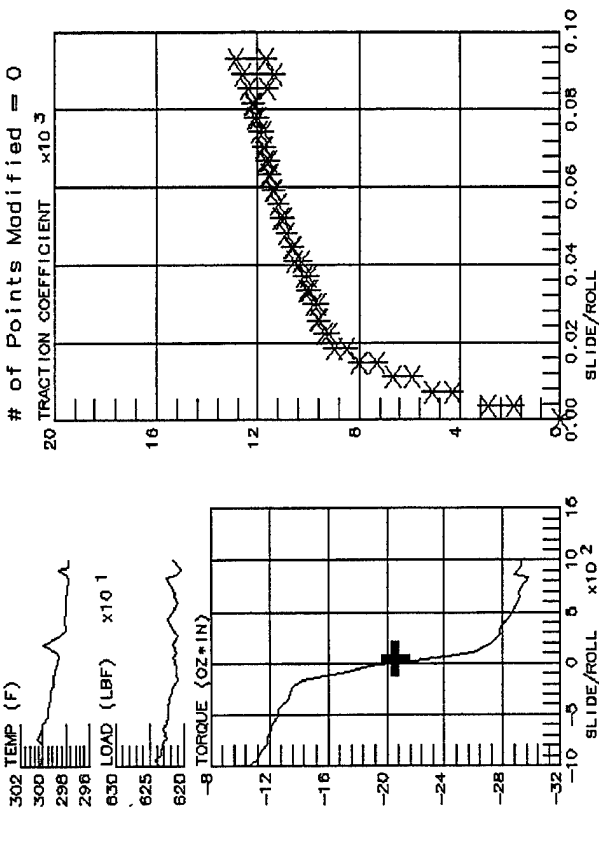
of Points Modified = 0



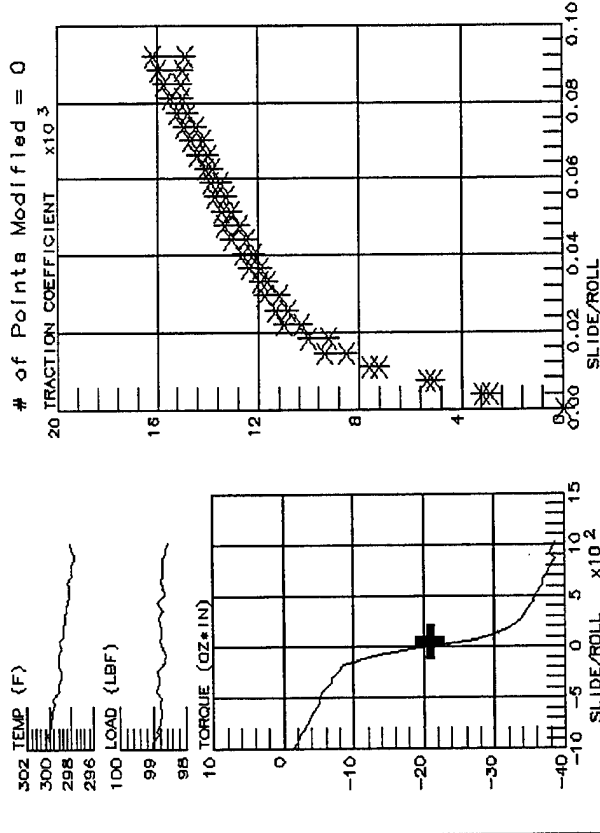
CP 90-715 ~300 Hatcol 3110 #209
300F 36LBF 1280RPM 12 FILE: cp3001



CP 90-715 ~300 Hatcol 3110 #210
300F 62LBF 1290RPM 13 FILE: cp3001

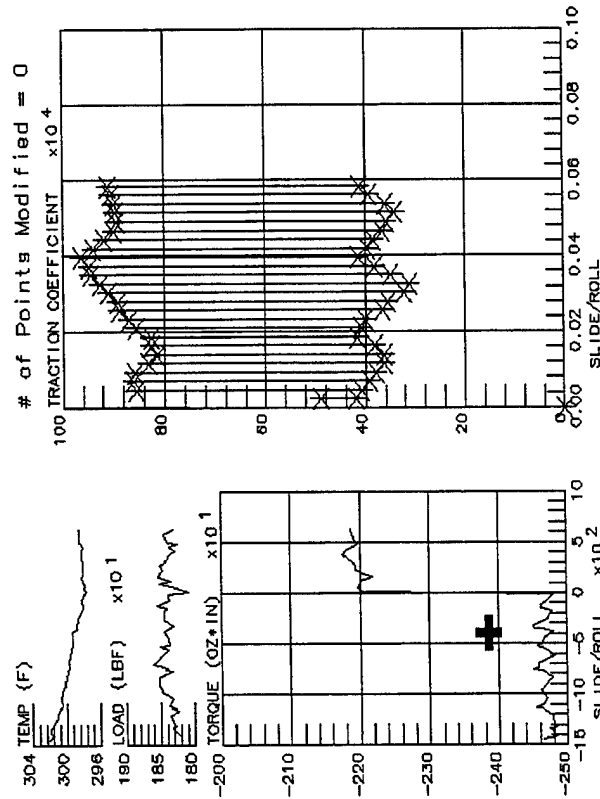


CP 90-715 ~300 Hatcol 3110 #211
300F 99LBF 1280RPM 14 FILE: cp3001

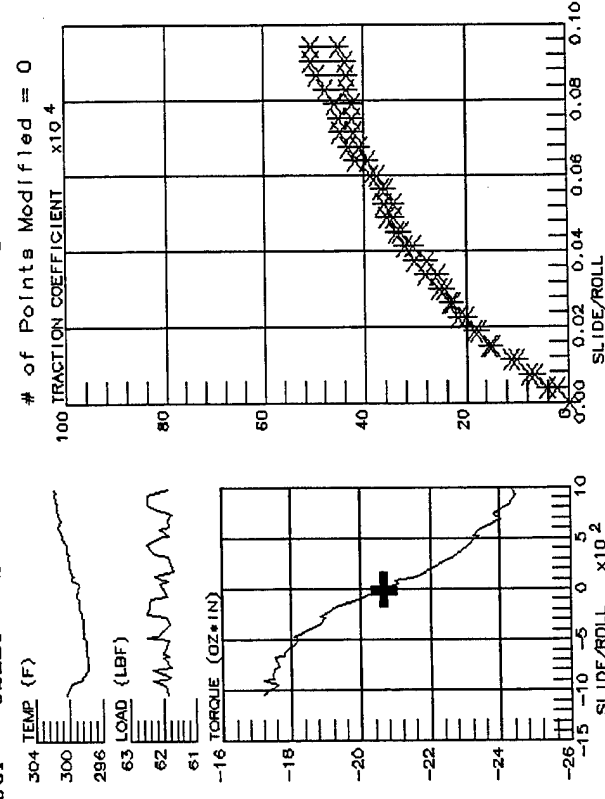


TRACTION MODELING

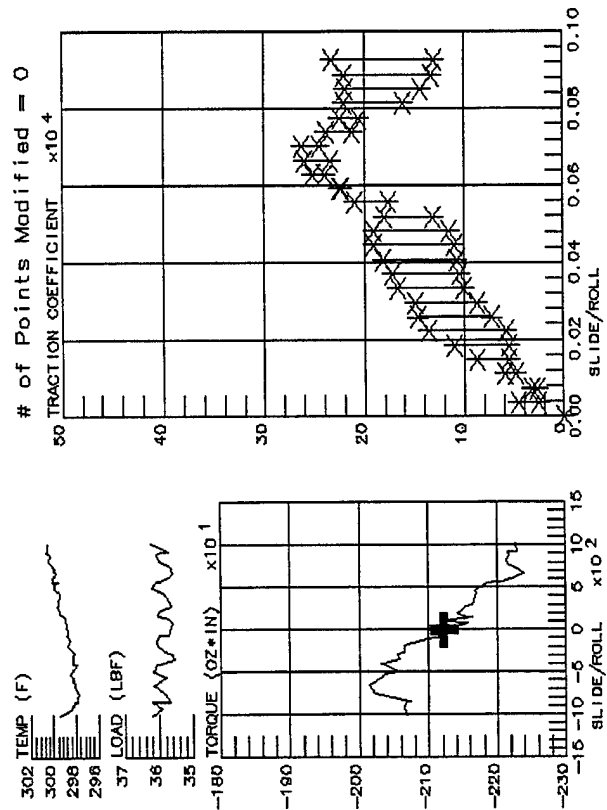
CP 90-715 ~300 Hatcol 3110 #213
300F 16LBF 2603RPM 1 FILE: cp300m



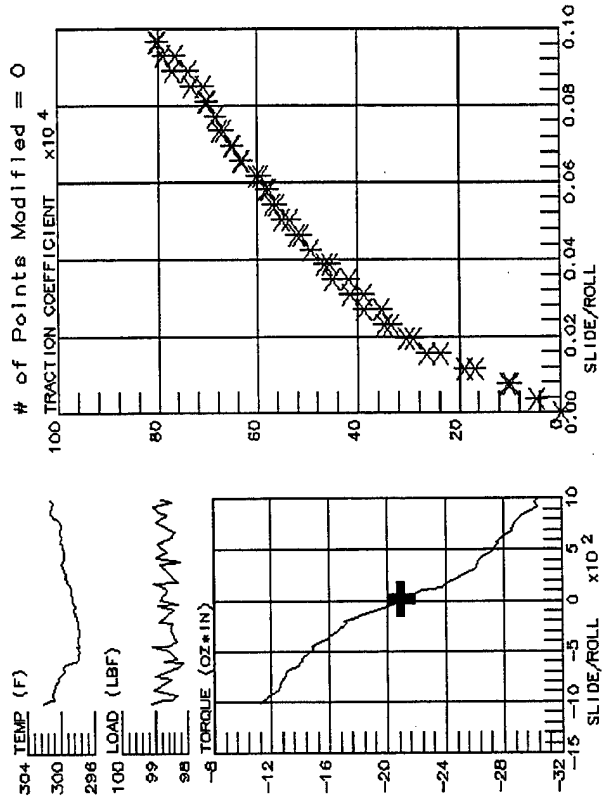
CP 90-715 ~300 Hatcol 3110 #215
300F 62LBF 2603RPM 3 FILE: cp300m



CP 90-715 ~300 Hatcol 3110 #214
300F 36LBF 2603RPM 2 FILE: cp300m

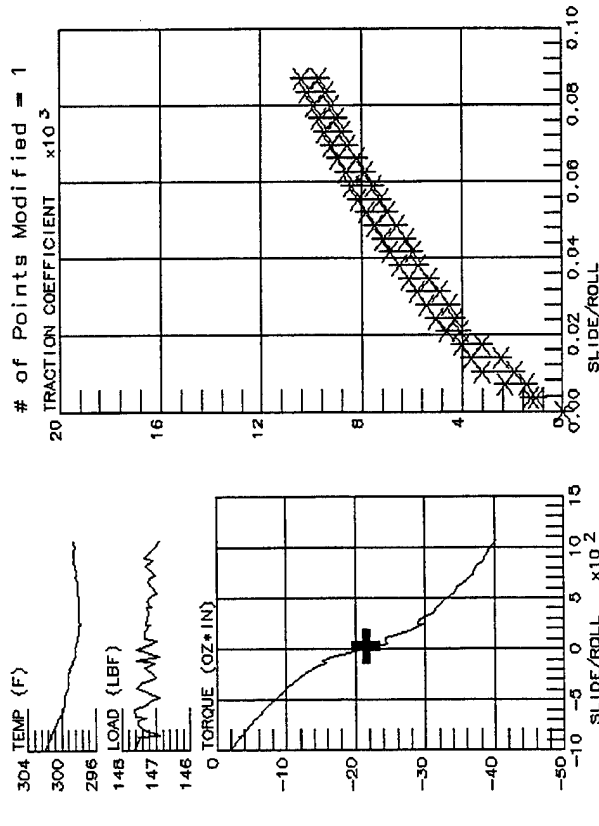


CP 90-715 ~300 Hatcol 3110 #216
300F 99LBF 2603RPM 4 FILE: cp300m

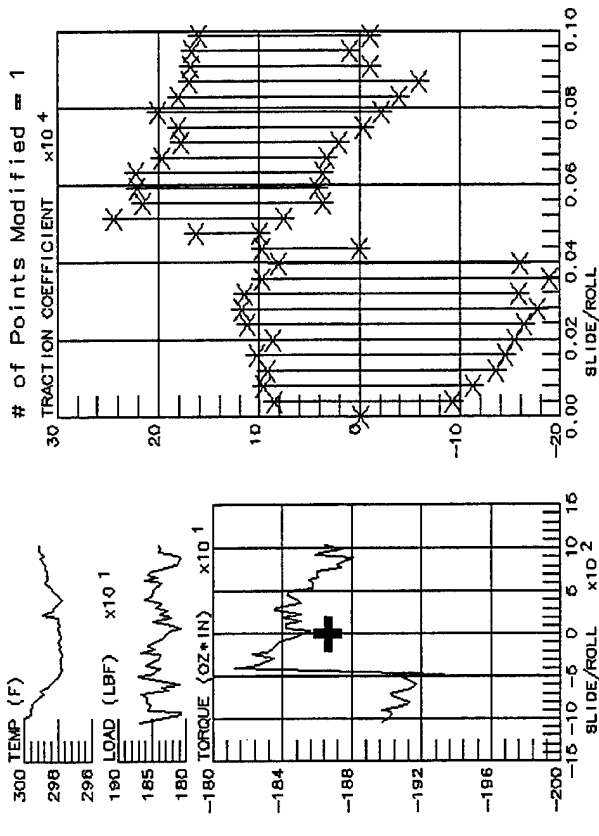


TRACTION MORING

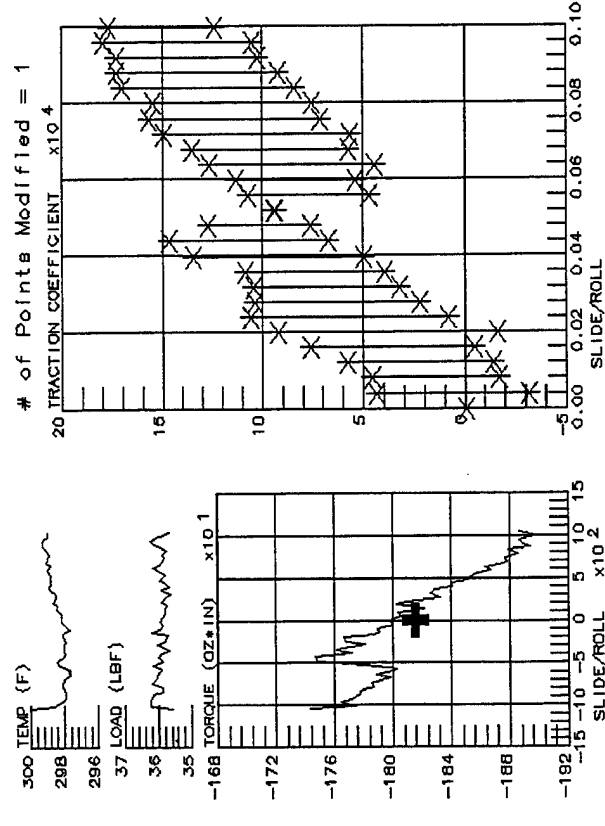
CP 90-715 ~300 Hatcol 3110 #217
300F 147LBF 2603RPM 5 FILE: cp300m



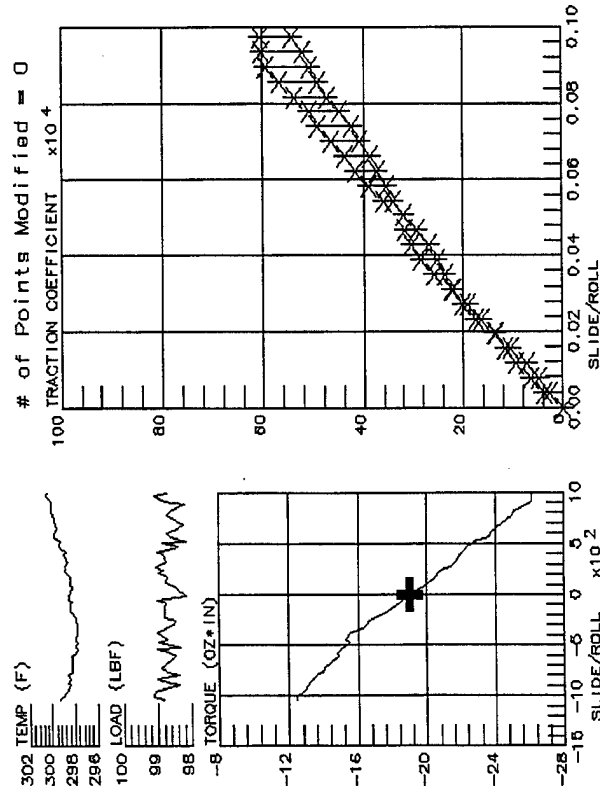
CP 90-715 ~300 Hatcol 3110 #218
300F 18LBF 5165RPM 8 FILE: cp300m



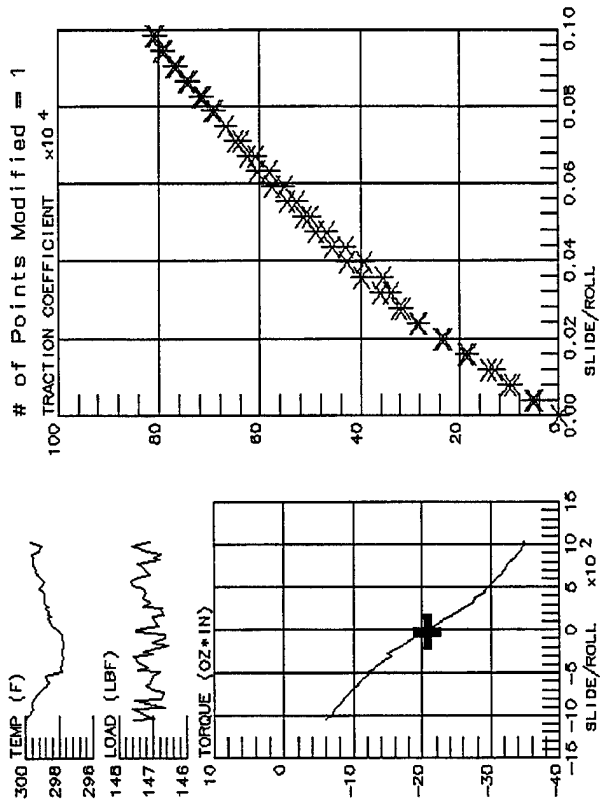
CP 90-715 ~300 Hatcol 3110 #219
300F 36LBF 5165RPM 7 FILE: cp300m



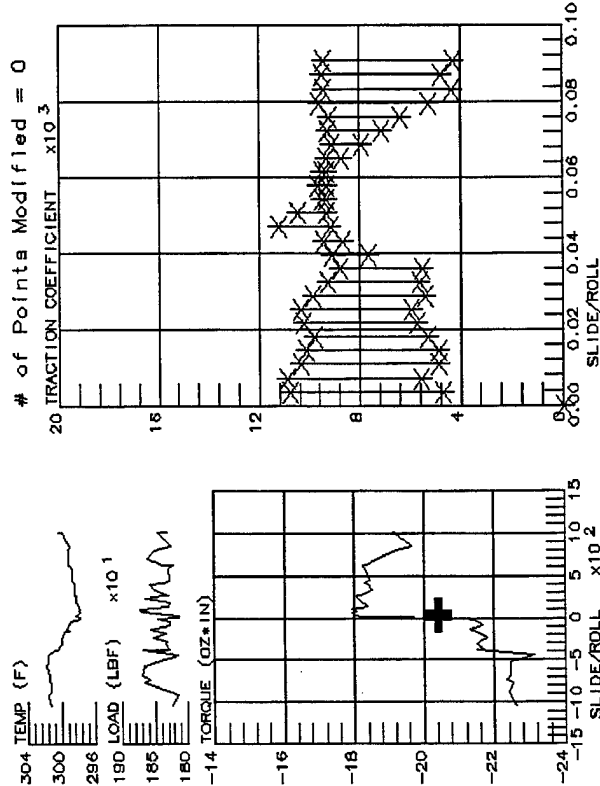
CP 90-715 ~300 Hatcol 3110 #221
300F 99LBF 516RPM 9 FILE: cp300m



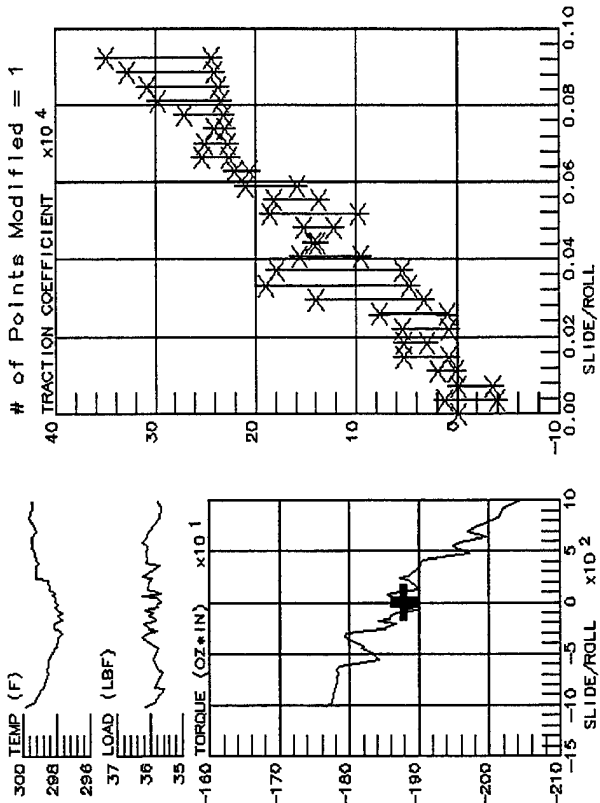
CP 90-715 ~300 Hatcol 3110 #222
300F 147LBF 516RPM 10 FILE: cp300m



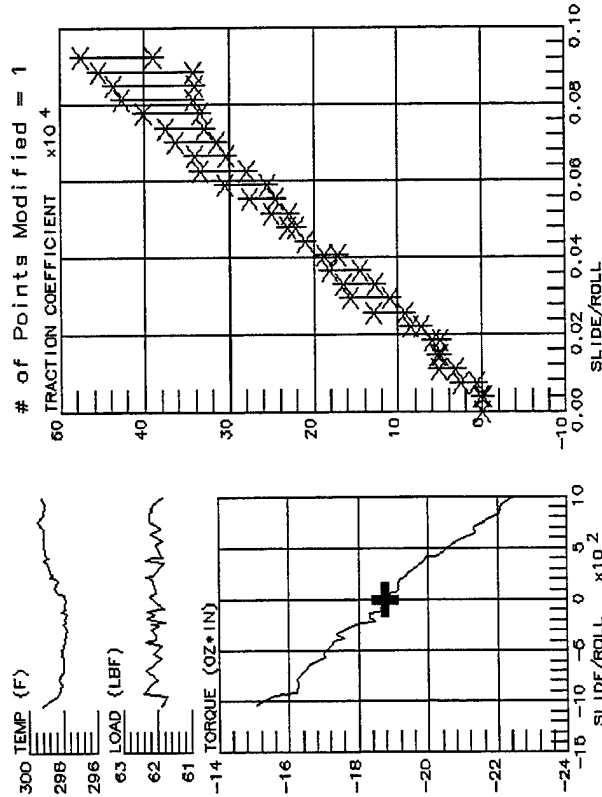
CP 90-715 ~300 Hatcol 3110 #223
300F 18LBF 7770RPM 1 FILE: cp300h



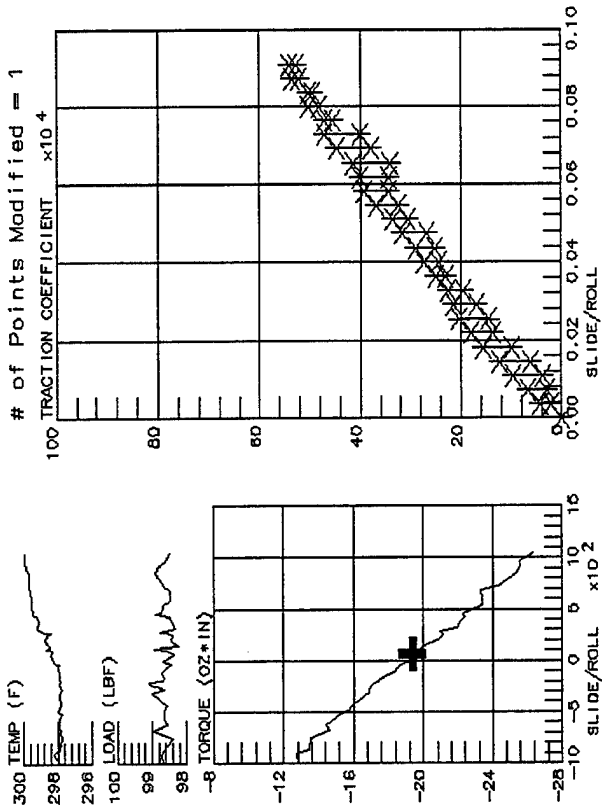
CP 90-715 ~300 Hatcol 3110 #224
300F 36LBF 7770RPM 2 FILE: cp300h



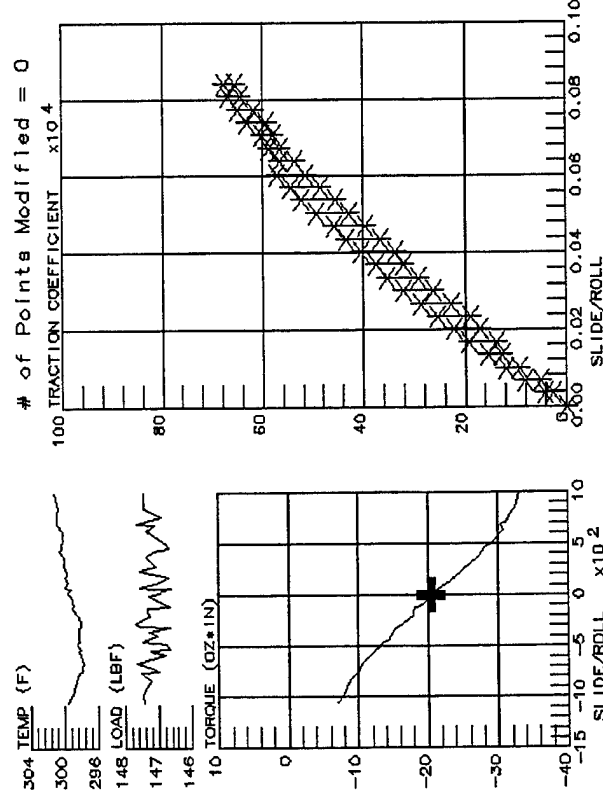
CP 90-715 ~300 Hatcol 3110 #225
300F 62LBF 7770RPM 3 FILE: cp300h



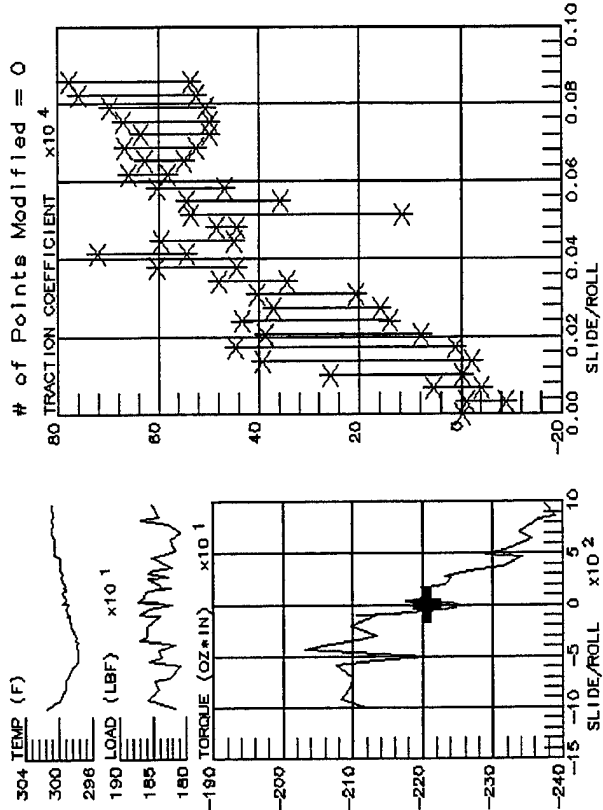
CP 90-715 ~300 Hatcol 3110 #228
300F 99LBF 7770RPM 4 FILE: cp300h



CP 90-715 ~300 Hatcol 3110 #227
300F 147LBF 7770RPM 5 FILE: cp300h



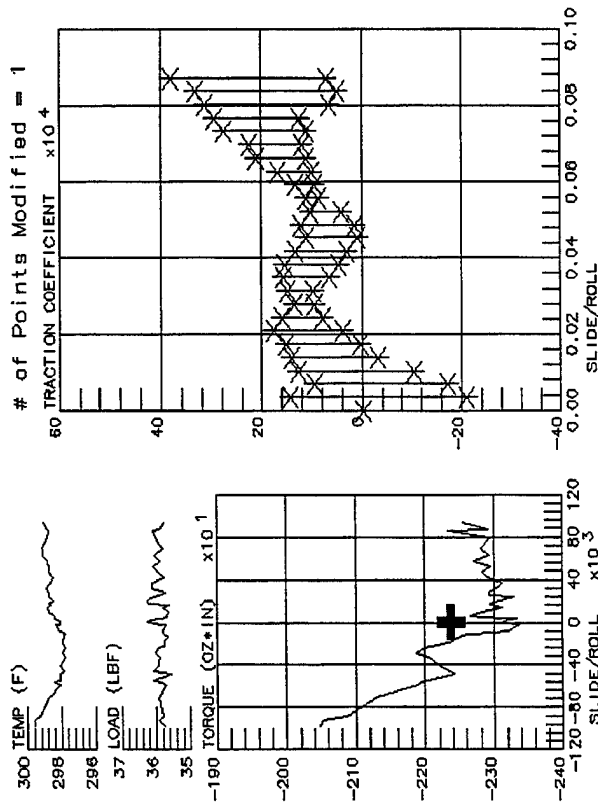
CP 90-715 ~300 Hatcol 3110 #228
300F 18LBF 10370RPM 6 FILE: cp300h



CP 90-715 ~300 Hatcol 3110
300F 36LBF 10370RPM 7 FILE: cp300h

#229

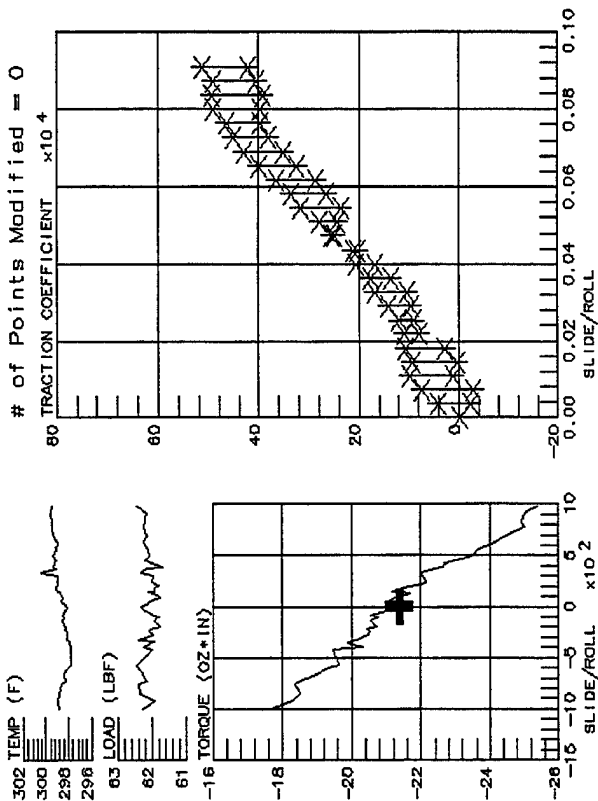
of Points Modified = 1



CP 90-715 ~300 Hatcol 3110
300F 62LBF 10370RPM 8 FILE: cp300h

#230

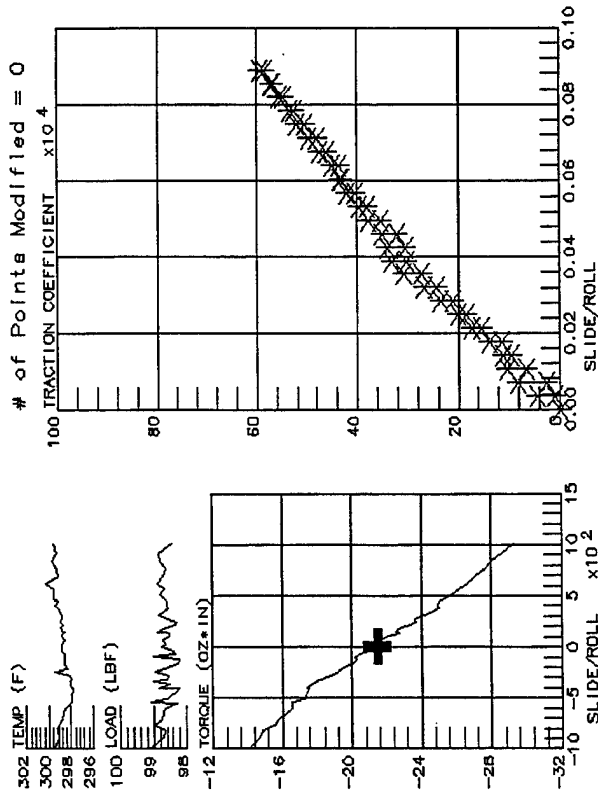
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
300F 99LBF 10370RPM 9 FILE: cp300h

#231

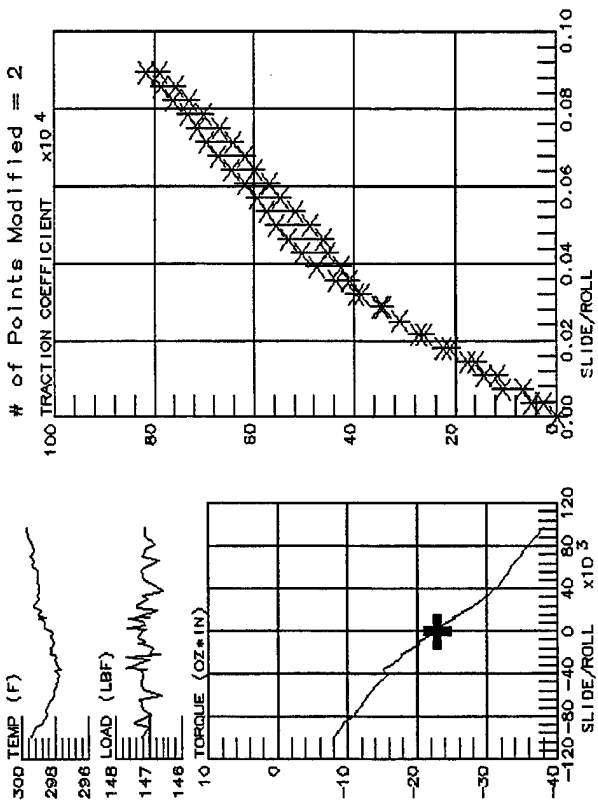
of Points Modified = 0



CP 90-715 ~300 Hatcol 3110
300F 147LBF 10370RPM 10 FILE: cp300h

#232

of Points Modified = 2

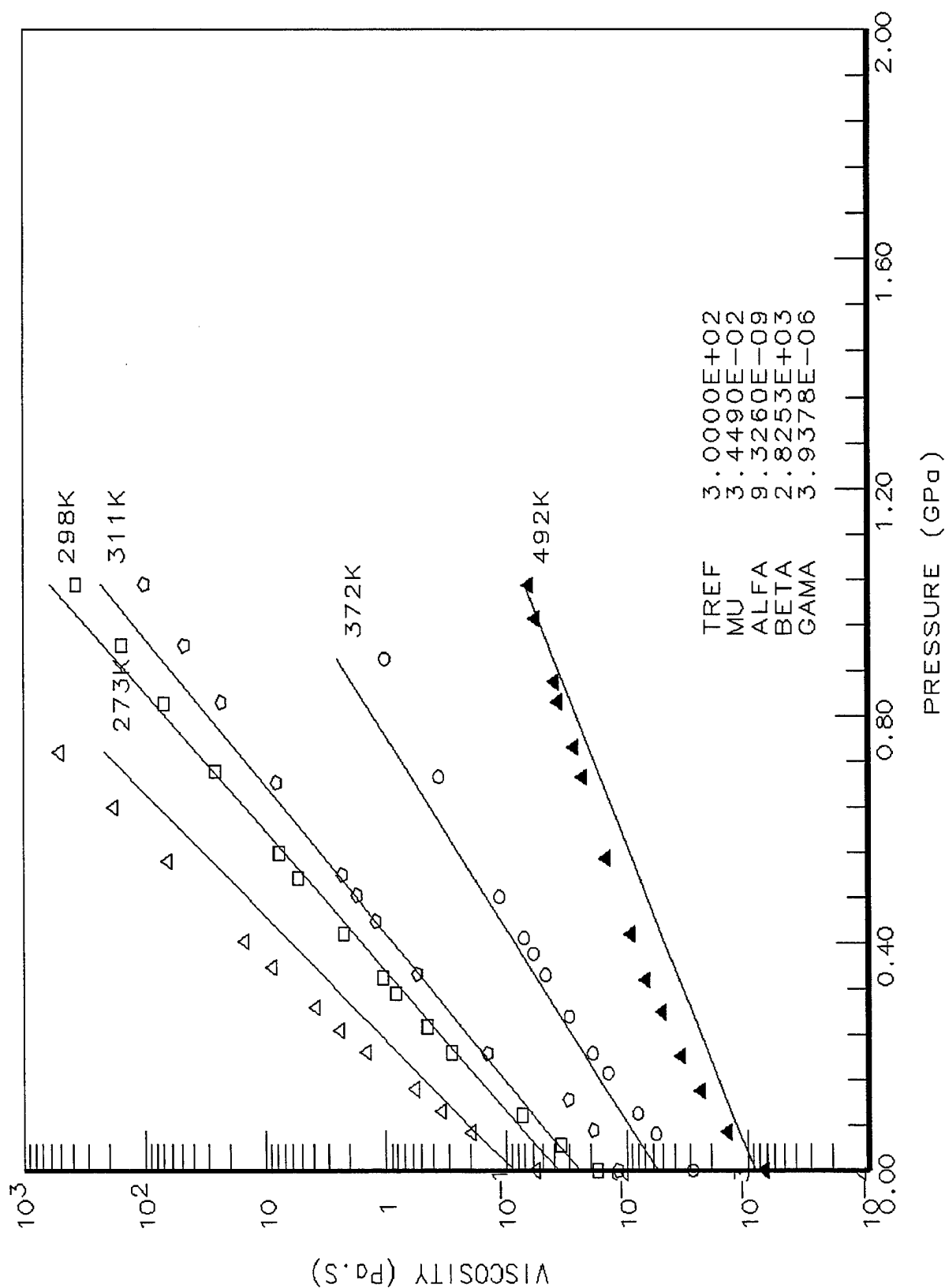


Lubricant name = CP 90-715 Hatcol 3110

NEWTONIAN MODEL TYPE 1

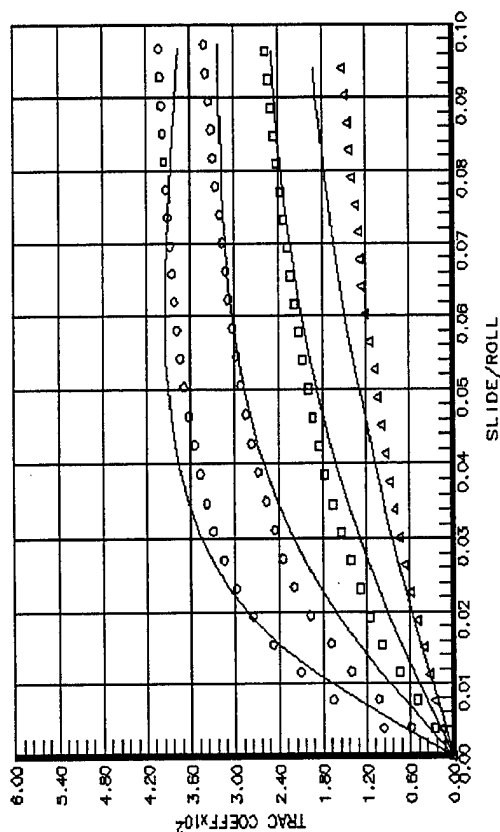
| Dataset Name | Inlet Temp (K) | Roll Velocity (M/S) | XMU* (Pa.S) | ALFA* (1/Pa) | BETA* (1/K) |
|-----------------|----------------------|---------------------------|----------------|-----------------|----------------|
| cp2.dat | 3.0000E+02 | 2.5109E+00 | 9.2051E-01 | 5.0000E-09 | 4.3473E-01 |
| cp3.dat | 3.0000E+02 | 5.1062E+00 | 6.7526E-01 | 5.0000E-09 | 1.3732E-01 |
| cp4.dat | 3.0000E+02 | 1.0132E+01 | 4.5299E-01 | 5.0000E-09 | 6.6092E-02 |
| cp5.dat | 3.0000E+02 | 1.5242E+01 | 4.4691E-01 | 5.0000E-09 | 5.6217E-02 |
| cp6.dat | 3.0000E+02 | 2.0342E+01 | 5.9185E-01 | 5.0000E-09 | 6.6681E-02 |
| cp8.dat | 3.1111E+02 | 2.5109E+00 | 5.8793E-01 | 5.0000E-09 | 5.1887E-01 |
| cp9.dat | 3.1111E+02 | 5.1062E+00 | 4.5114E-01 | 5.0000E-09 | 1.4422E-01 |
| cp10.dat | 3.1111E+02 | 1.0132E+01 | 2.8924E-01 | 5.0000E-09 | 6.7605E-02 |
| cp11.dat | 3.1111E+02 | 1.5242E+01 | 3.2249E-01 | 5.0000E-09 | 7.0198E-02 |
| cp12.dat | 3.1111E+02 | 2.0342E+01 | 4.1836E-01 | 5.0000E-09 | 7.3390E-02 |
| cp15.dat | 3.3889E+02 | 5.1062E+00 | 1.1348E-01 | 5.0000E-09 | 1.6931E-01 |
| cp16.dat | 3.3889E+02 | 1.0132E+01 | 9.0962E-02 | 5.0000E-09 | 9.4484E-02 |
| cp17.dat | 3.3889E+02 | 1.5242E+01 | 9.2071E-02 | 5.0000E-09 | 7.6482E-02 |
| cp18.dat | 3.3889E+02 | 2.0342E+01 | 1.4068E-01 | 5.0000E-09 | 1.0353E-01 |
| cp21.dat | 3.6667E+02 | 5.1062E+00 | 4.6175E-02 | 5.0000E-09 | 3.2969E-01 |
| cp22.dat | 3.6667E+02 | 1.0132E+01 | 3.4040E-02 | 5.0000E-09 | 1.2959E-01 |
| cp23.dat | 3.6667E+02 | 1.5242E+01 | 3.5020E-02 | 5.0000E-09 | 9.9915E-02 |
| cp24.dat | 3.6667E+02 | 2.0342E+01 | 5.7679E-02 | 5.0000E-09 | 1.6787E-01 |
| cp28.dat | 3.9444E+02 | 1.0132E+01 | 1.2017E-02 | 5.0000E-09 | 2.4156E-01 |
| cp29.dat | 3.9444E+02 | 1.5242E+01 | 1.4485E-02 | 5.0000E-09 | 2.0209E-01 |
| cp30.dat | 3.9444E+02 | 2.0342E+01 | 1.6237E-02 | 5.0000E-09 | 1.7232E-01 |
| cp34.dat | 4.2222E+02 | 1.0132E+01 | 5.6320E-03 | 5.0000E-09 | 2.3484E-01 |
| cp35.dat | 4.2222E+02 | 1.5242E+01 | 5.4121E-03 | 5.0000E-09 | 2.9816E-01 |
| cp36.dat | 4.2222E+02 | 2.0342E+01 | 5.7573E-03 | 5.0000E-09 | 1.8792E-01 |

90-715 Hatcol 3110 Viscosity Model Type 2



CP 90-715 ~300 Hat col 3110

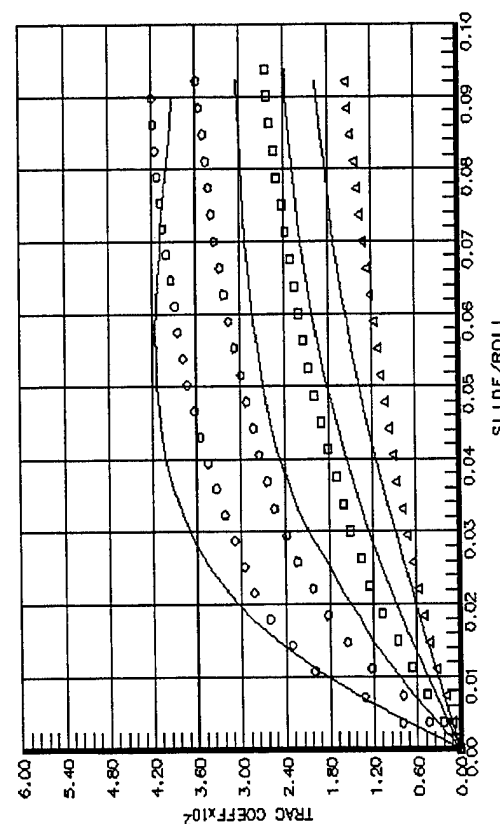
CP 90-713
NEWTONIAN MODEL

[illegible]

CP 90-215 ~300 Hatcol 3110

CP 90-715

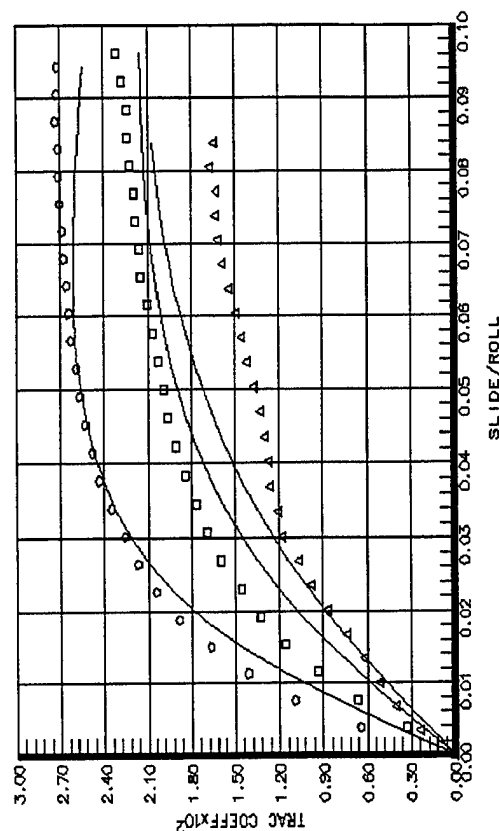
| NEWTONIAN MODEL | TYPE 1 | OP.2.01 | XMU* | ALFA* | BETA* |
|-----------------|---------|---------|------|-----------|-----------|
| 160N | 2.51M/S | 300K | # 13 | 9.206E-01 | 4.347E-01 |
| 830NPA | 2.51M/S | 300K | # 13 | 5.000E-09 | 4.347E-01 |
| 90NPA | 2.78N | 300K | # 15 | 5.000E-09 | 4.347E-01 |
| 1163NPA | 4.40N | 300K | # 18 | 5.000E-09 | 4.347E-01 |
| 1163NPA | 4.40N | 300K | # 18 | 5.000E-09 | 4.347E-01 |
| 554N | 2.51M/S | 300K | # 18 | 5.000E-09 | 4.347E-01 |



CP 90-715 ~ 300 Hatcol 3110

CP 90-715
NEWTONIAN MODEL

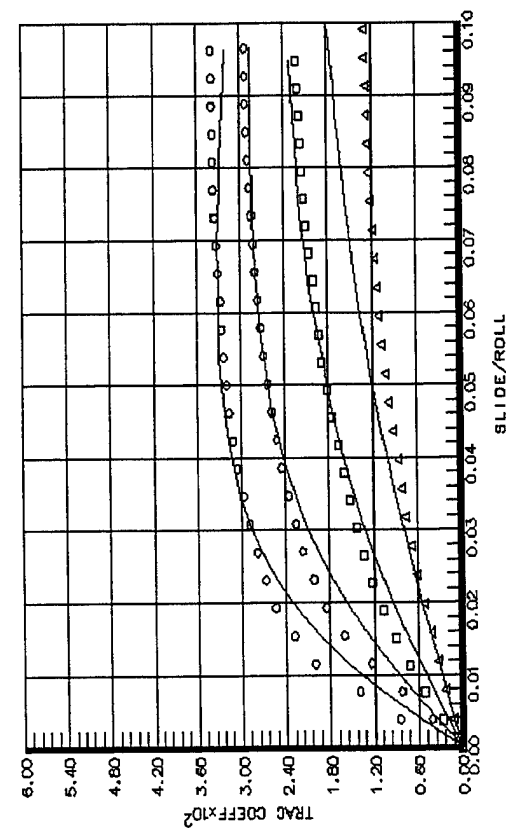
| NEWTONIAN MODEL | TYPE I | XMU* | ALFA* | BETA* |
|-----------------|----------|-----------|-----------|-----------|
| Δ 830NPA | 15.24M/S | 300K # 40 | 4.459E-01 | 5.000E-09 |
| Δ 830NPA | 276N | 300K # 33 | 4.459E-01 | 5.000E-09 |
| Δ 896NPA | 15.24M/S | 300K # 34 | 4.459E-01 | 5.000E-09 |
| Δ 1163NPA | 15.24M/S | 300K # 33 | 4.459E-01 | 5.000E-09 |



| | | | | |
|----|--------|------|---------------------|------|
| CD | 00-215 | 2000 | H ₂ +ccl | 3110 |
|----|--------|------|---------------------|------|

CP 90-715

| NEWTONIAN MODEL | | TYPE 1 | cp4.dat | ALFA* | BETA* |
|-----------------|---------|--------|---------|-----------|-----------|
| 4 | 831NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 988NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 278N | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 440N | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 1163NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 440N | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 1163NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 278N | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 988NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |
| 4 | 831NPA | 10.13M | 300K | 5.000E-01 | 6.698E-02 |

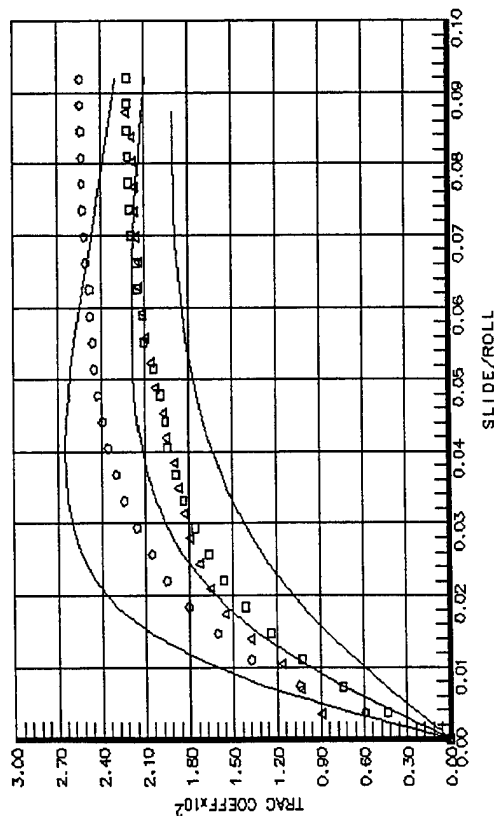


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL

TYPE 1 op6.dat

| ALFA* | BETA* |
|-----------|-----------|
| 5.000E-01 | 5.688E-02 |
| 5.000E-01 | 5.688E-02 |
| 5.000E-01 | 5.688E-02 |

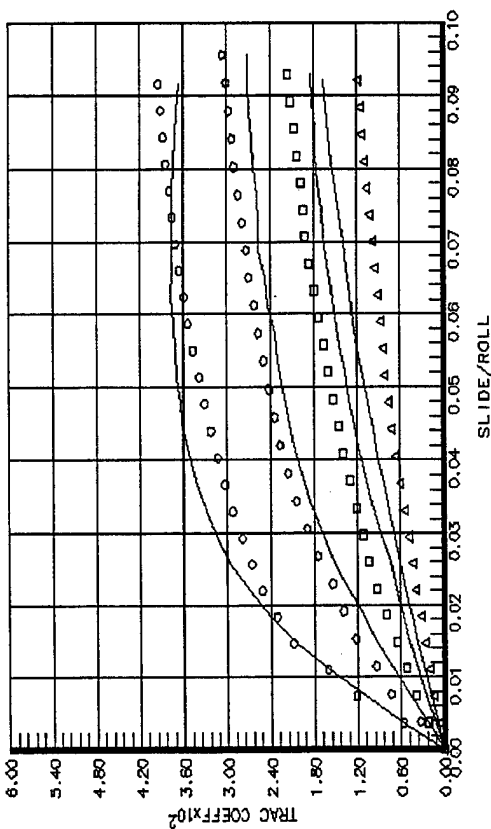


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL

TYPE 1 op8.dat

| ALFA* | BETA* |
|-----------|-----------|
| 5.000E-01 | 5.189E-01 |
| 5.000E-01 | 5.189E-01 |
| 5.000E-01 | 5.189E-01 |

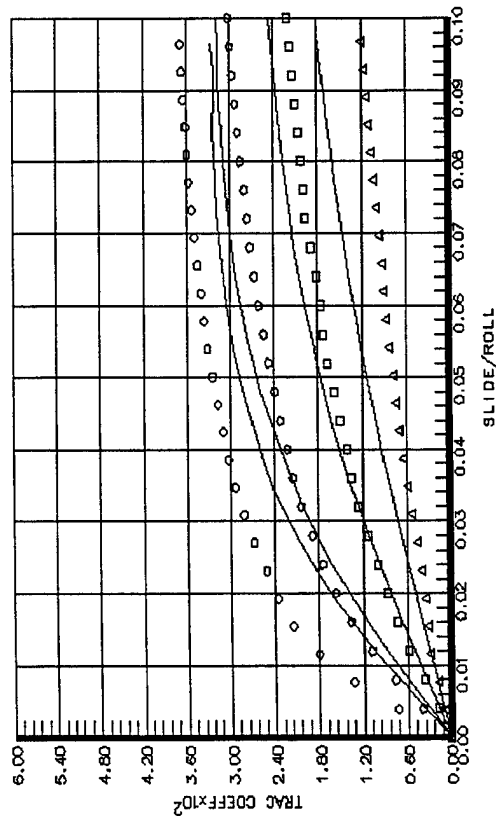


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL

TYPE 1 op9.dat

| ALFA* | BETA* |
|-----------|-----------|
| 5.000E-01 | 1.442E-01 |
| 5.000E-01 | 1.442E-01 |
| 5.000E-01 | 1.442E-01 |

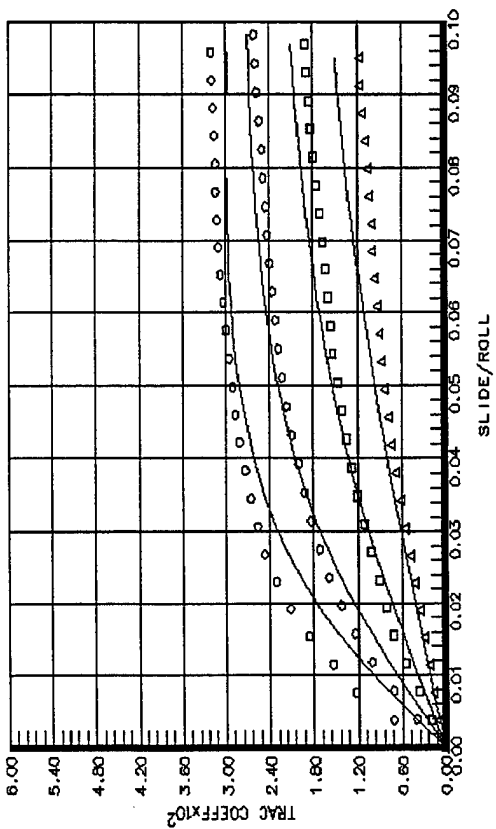


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL

TYPE 1 op10.dat

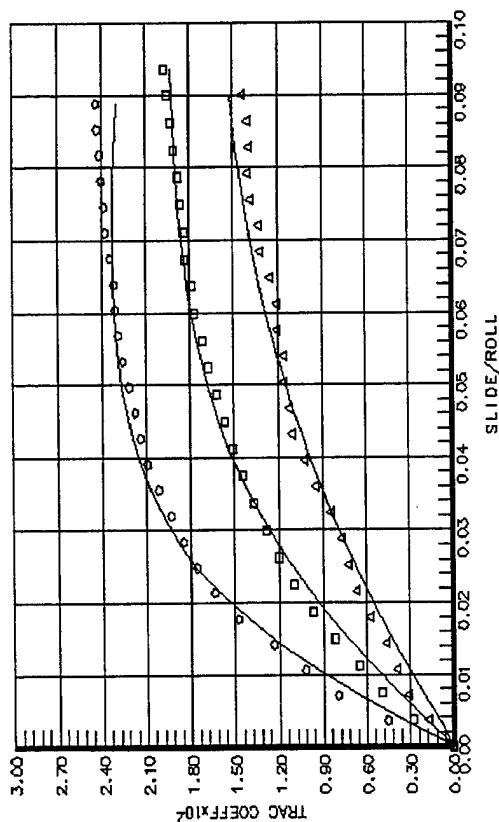
| ALFA* | BETA* |
|-----------|-----------|
| 5.000E-01 | 6.781E-02 |
| 5.000E-01 | 6.781E-02 |
| 5.000E-01 | 6.781E-02 |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op11.dat

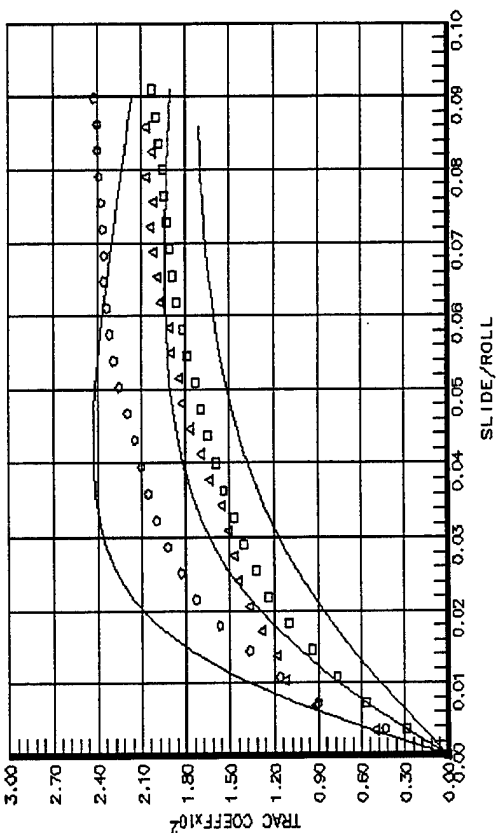
| | 160N | 276N | 440N | 15.24M/S 311K # 88 | 3.226E-01 | 5.000E-09 | 7.020E-02 | BETA* |
|---|--------|--------|---------|--------------------|-----------|--|--------------------------|-------|
| Δ | 830MPa | 998MPa | 1163MPa | 15.24M/S 311K # 78 | 3.226E-01 | 5.000E-09 <td>7.020E-02 <td>ALFA*</td> </td> | 7.020E-02 <td>ALFA*</td> | ALFA* |
| □ | | | | 16.24M/S 311K # 88 | 3.226E-01 | 5.000E-09 <td>7.020E-02 <td>XMU*</td> </td> | 7.020E-02 <td>XMU*</td> | XMU* |
| ○ | | | | | | | | |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op12.dat

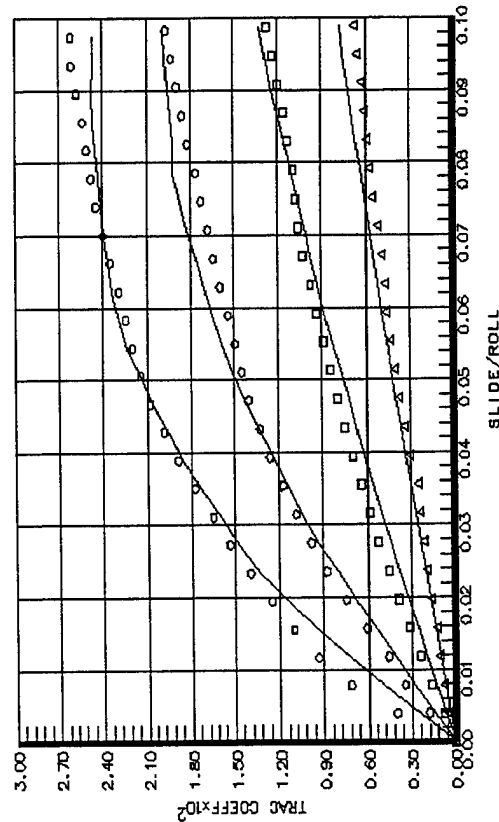
| | 160N | 276N | 440N | 20.34M/S 311K # 78 | 4.184E-01 | 5.000E-08 | 7.339E-02 | BETA* |
|---|--------|--------|---------|--------------------|-----------|-----------|-----------|-------|
| Δ | 830MPa | 998MPa | 1163MPa | 20.34M/S 311K # 98 | 4.184E-01 | 5.000E-08 | 7.339E-02 | ALFA* |
| □ | | | | 20.34M/S 311K # 80 | 4.184E-01 | 5.000E-08 | 7.339E-02 | XMU* |
| ○ | | | | | | | | |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op16.dat

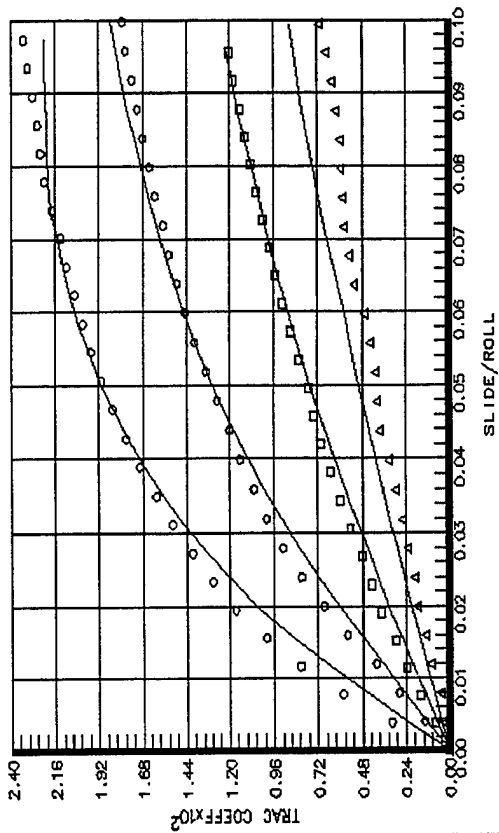
| | 160N | 276N | 440N | 5.11M/S 339K #113 | 1.135E-01 | 5.000E-09 | 1.693E-01 | BETA* |
|---|--------|--------|---------|-------------------|-----------|-----------|-----------|-------|
| Δ | 830MPa | 998MPa | 1163MPa | 5.11M/S 339K #114 | 1.135E-01 | 5.000E-09 | 1.693E-01 | ALFA* |
| □ | | | | 5.11M/S 339K #115 | 1.135E-01 | 5.000E-09 | 1.693E-01 | XMU* |
| ○ | | | | 5.11M/S 339K #120 | 1.135E-01 | 5.000E-09 | 1.693E-01 | |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op16.dat

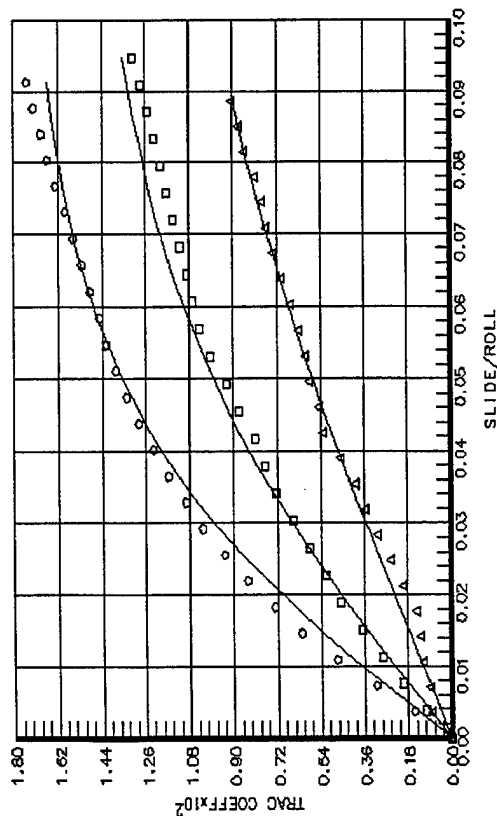
| | 160N | 276N | 440N | 10.13M/S 339K #117 | 9.098E-02 | 5.000E-08 | 9.448E-02 | BETA* |
|---|--------|--------|---------|--------------------|-----------|-----------|-----------|-------|
| Δ | 830MPa | 998MPa | 1163MPa | 10.13M/S 339K #118 | 9.098E-02 | 5.000E-08 | 9.448E-02 | ALFA* |
| □ | | | | 10.13M/S 339K #119 | 9.098E-02 | 5.000E-08 | 9.448E-02 | XMU* |
| ○ | | | | 10.13M/S 339K #121 | 9.098E-02 | 5.000E-08 | 9.448E-02 | |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op17.dat

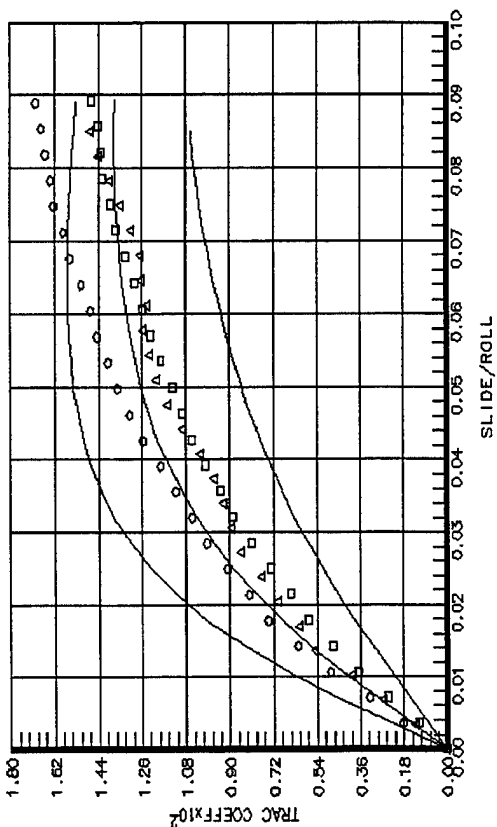
| | 150N | 276N | 440N | 15.24M/S | 339K #123 | 9.207E-02 | 5.000E-09 | 7.648E-02 | BETA* |
|---|---------|------|------|----------|-----------|-----------|-----------|-----------|-----------|
| Δ | 830MPa | 150N | 276N | 15.24M/S | 339K #123 | 9.207E-02 | 5.000E-09 | 7.648E-02 | 1.035E-01 |
| □ | 998MPa | 276N | 440N | 15.24M/S | 339K #123 | 9.207E-02 | 5.000E-09 | 7.648E-02 | 1.035E-01 |
| ○ | 1163MPa | 440N | | 15.24M/S | 339K #123 | 9.207E-02 | 5.000E-09 | 7.648E-02 | 1.035E-01 |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op18.dat

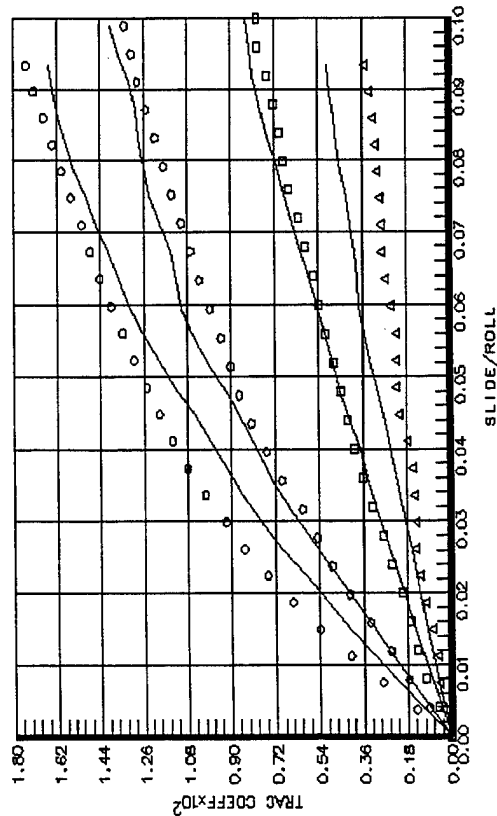
| | 150N | 276N | 440N | 20.34M/S | 339K #127 | 1.407E-01 | 5.000E-09 | 1.035E-01 | BETA* |
|---|---------|------|------|--|--|---|--|------------------------------|-----------|
| Δ | 830MPa | 150N | 276N | 20.34M/S <td>339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td></td> | 339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td> | 1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td> | 1.035E-01 <td>1.035E-01</td> | 1.035E-01 |
| □ | 998MPa | 276N | 440N | 20.34M/S <td>339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td></td> | 339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td> | 1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td> | 1.035E-01 <td>1.035E-01</td> | 1.035E-01 |
| ○ | 1163MPa | 440N | | 20.34M/S <td>339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td></td> | 339K #127 <td>1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td></td> | 1.407E-01 <td>5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>1.035E-01 <td>1.035E-01</td> </td> | 1.035E-01 <td>1.035E-01</td> | 1.035E-01 |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cpal.dat

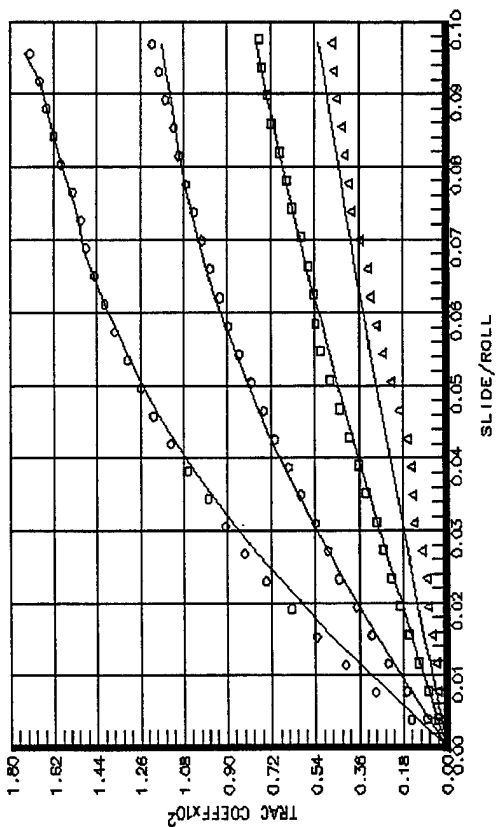
| | 150N | 276N | 440N | 5.11M/S | 367K #146 | 4.817E-02 | 5.000E-09 | 3.287E-01 | BETA* |
|---|---------|------|------|---|--|---|--|------------------------------|-----------|
| Δ | 830MPa | 150N | 276N | 5.11M/S <td>367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td></td> | 367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td> | 4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td> | 3.287E-01 <td>1.035E-01</td> | 1.035E-01 |
| □ | 998MPa | 276N | 440N | 5.11M/S <td>367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td></td> | 367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td> | 4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td> | 3.287E-01 <td>1.035E-01</td> | 1.035E-01 |
| ○ | 1163MPa | 440N | | 5.11M/S <td>367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td></td> | 367K #146 <td>4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td></td> | 4.817E-02 <td>5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td></td> | 5.000E-09 <td>3.287E-01 <td>1.035E-01</td> </td> | 3.287E-01 <td>1.035E-01</td> | 1.035E-01 |



CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 cp22.dat

| | 150N | 276N | 440N | 10.13M/S | 367K #150 | 3.404E-02 | 5.000E-09 | 1.288E-01 | BETA* |
|---|---------|------|------|--|--|---|--|------------------------------|-----------|
| Δ | 830MPa | 150N | 276N | 10.13M/S <td>367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td></td> | 367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td> | 3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td> | 5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td> | 1.288E-01 <td>1.288E-01</td> | 1.288E-01 |
| □ | 998MPa | 276N | 440N | 10.13M/S <td>367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td></td> | 367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td> | 3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td> | 5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td> | 1.288E-01 <td>1.288E-01</td> | 1.288E-01 |
| ○ | 1163MPa | 440N | | 10.13M/S <td>367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td></td> | 367K #150 <td>3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td></td> | 3.404E-02 <td>5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td></td> | 5.000E-09 <td>1.288E-01 <td>1.288E-01</td> </td> | 1.288E-01 <td>1.288E-01</td> | 1.288E-01 |

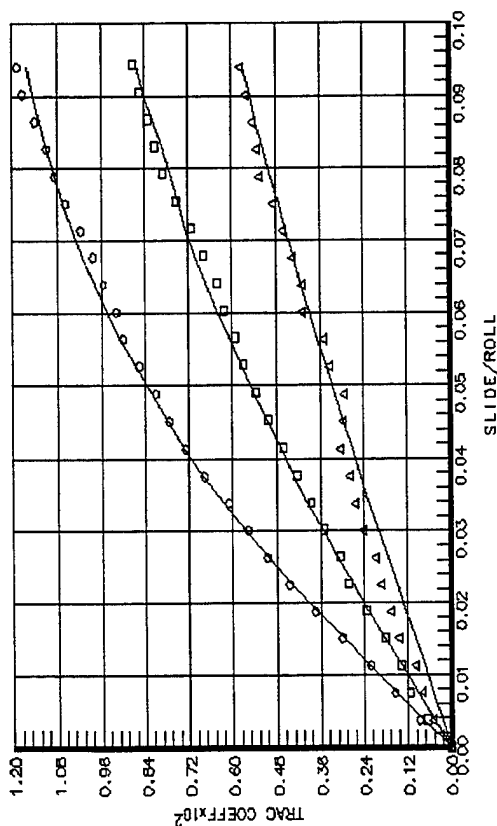


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op23.dat

| | 160N | 278N | 440N |
|---------|--------------------|-----------|---------------------|
| 830MPA | 15.24M/S 367K #156 | 3.502E-02 | 5.000E-09 9.991E-01 |
| 998MPA | 15.24M/S 367K #167 | 3.502E-02 | 5.000E-09 9.991E-01 |
| 1163MPA | 15.24M/S 367K #168 | 3.502E-02 | 5.000E-09 9.991E-01 |

ALPHA* 5.000E-09 9.991E-01
BETA* 5.000E-09 9.991E-01

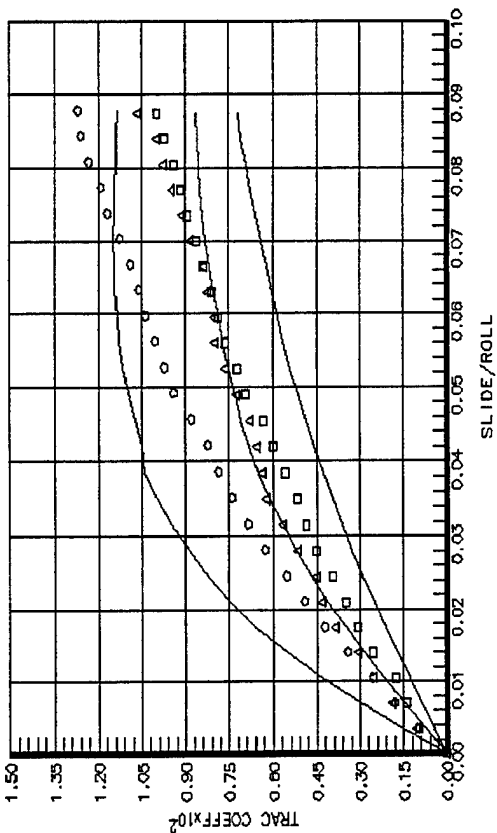


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op24.dat

| | 160N | 278N | 440N |
|---------|--------------------|-----------|---------------------|
| 830MPA | 20.34M/S 367K #160 | 5.788E-02 | 5.000E-09 1.878E-01 |
| 998MPA | 20.34M/S 367K #161 | 5.788E-02 | 5.000E-09 1.878E-01 |
| 1162MPA | 20.34M/S 367K #162 | 5.788E-02 | 5.000E-09 1.878E-01 |

ALPHA* 5.000E-09 1.878E-01
BETA* 5.000E-09 1.878E-01

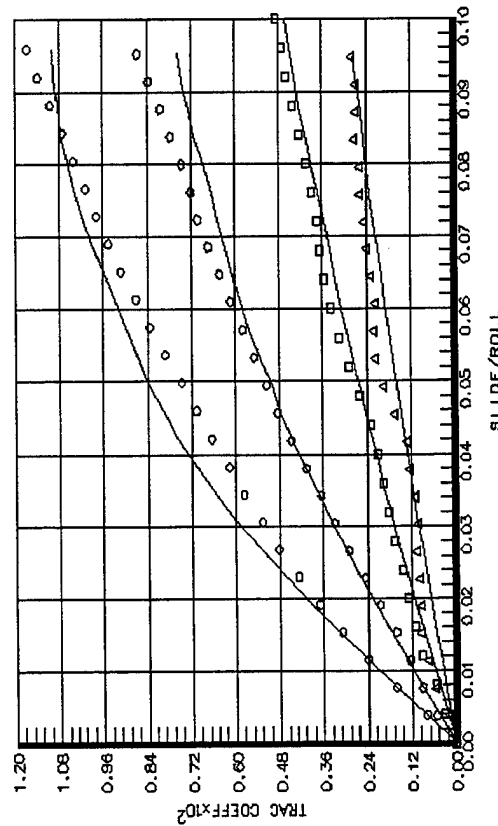


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op25.dat

| | 160N | 278N | 440N |
|---------|--------------------|-----------|---------------------|
| 830MPA | 10.13M/S 394K #184 | 1.202E-02 | 5.000E-09 2.418E-01 |
| 998MPA | 10.13M/S 394K #185 | 1.202E-02 | 5.000E-09 2.418E-01 |
| 1328MPA | 10.13M/S 394K #187 | 1.202E-02 | 5.000E-09 2.418E-01 |

ALPHA* 5.000E-09 2.418E-01
BETA* 5.000E-09 2.418E-01

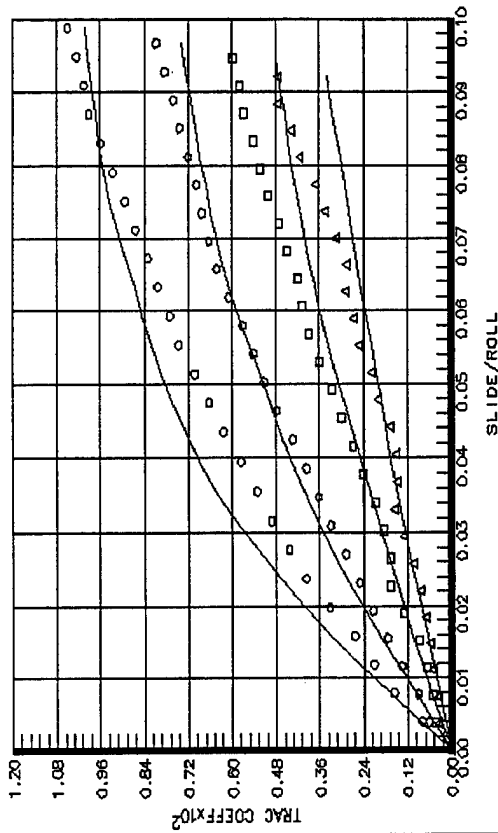


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op29.dat

| | 160N | 278N | 440N |
|---------|--------------------|-----------|---------------------|
| 830MPA | 15.24M/S 394K #188 | 1.449E-02 | 5.000E-09 2.021E-01 |
| 998MPA | 15.24M/S 394K #189 | 1.449E-02 | 5.000E-09 2.021E-01 |
| 1328MPA | 15.24M/S 394K #192 | 1.449E-02 | 5.000E-09 2.021E-01 |

ALPHA* 5.000E-09 2.021E-01
BETA* 5.000E-09 2.021E-01

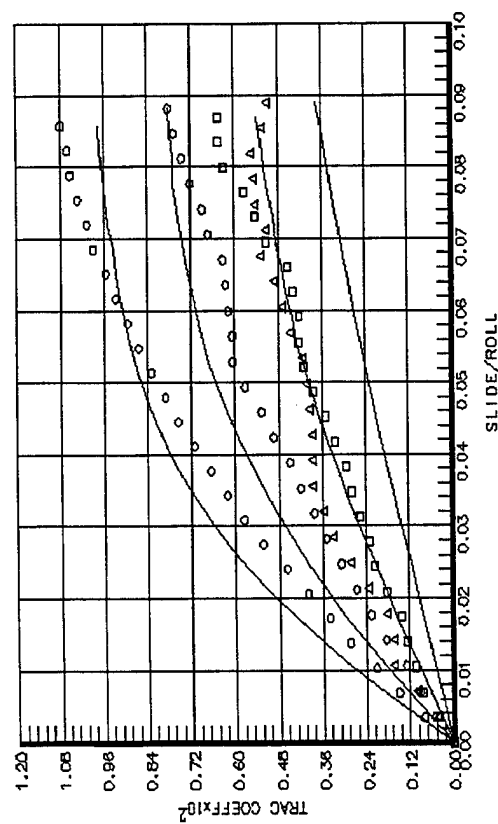


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op80.dat

| | 160N | 276N | 440N | 654N |
|---------|----------|-----------|-----------|-----------|
| 830MPa | 20.34M/S | 394K #194 | 1.824E-02 | 5.000E-03 |
| 998MPa | 20.34M/S | 394K #196 | 1.824E-02 | 5.000E-03 |
| 1163MPa | 20.34M/S | 394K #199 | 1.824E-02 | 5.000E-03 |
| 1328MPa | 20.34M/S | 394K #197 | 1.824E-02 | 5.000E-03 |

ALFA* 5.000E-03 5.000E-03 5.000E-03 5.000E-03
 BETA* 1.723E-01 1.723E-01 1.723E-01 1.723E-01

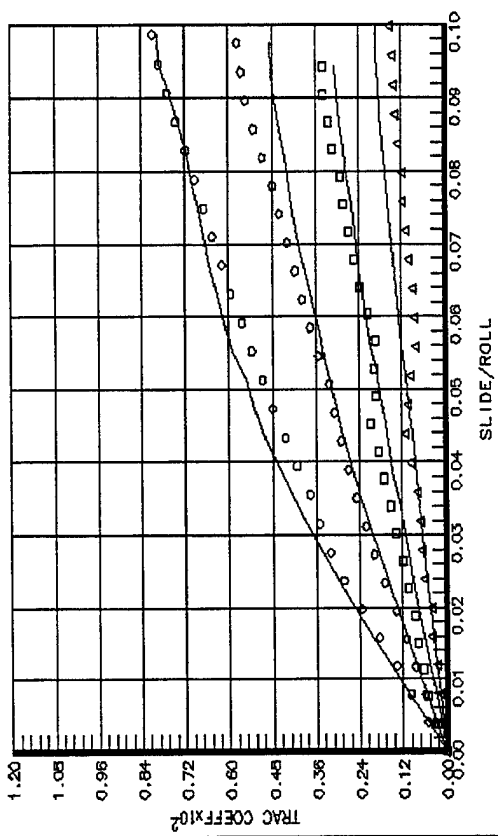


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op84.dat

| | 160N | 276N | 440N | 654N |
|---------|----------|-----------|-----------|-----------|
| 830MPa | 10.13M/S | 422K #218 | 5.632E-03 | 5.000E-03 |
| 998MPa | 10.13M/S | 422K #220 | 5.632E-03 | 5.000E-03 |
| 1163MPa | 10.13M/S | 422K #221 | 5.632E-03 | 5.000E-03 |
| 1328MPa | 10.13M/S | 422K #222 | 5.632E-03 | 5.000E-03 |

ALFA* 5.000E-03 5.000E-03 5.000E-03 5.000E-03
 BETA* 2.348E-01 2.348E-01 2.348E-01 2.348E-01

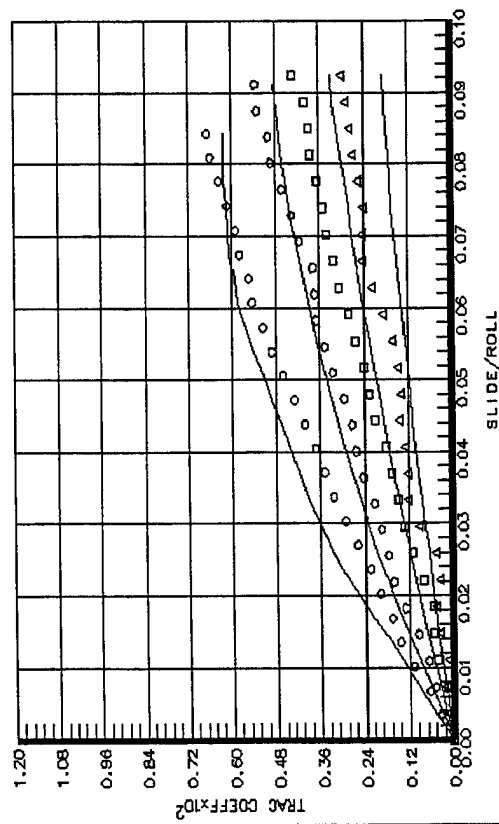


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op85.dat

| | 160N | 276N | 440N | 654N |
|---------|----------|-----------|-----------|-----------|
| 830MPa | 15.24M/S | 422K #224 | 5.412E-03 | 5.000E-03 |
| 998MPa | 15.24M/S | 422K #225 | 5.412E-03 | 5.000E-03 |
| 1163MPa | 15.24M/S | 422K #226 | 5.412E-03 | 5.000E-03 |
| 1328MPa | 15.24M/S | 422K #227 | 5.412E-03 | 5.000E-03 |

ALFA* 5.000E-03 5.000E-03 5.000E-03 5.000E-03
 BETA* 2.982E-01 2.982E-01 2.982E-01 2.982E-01

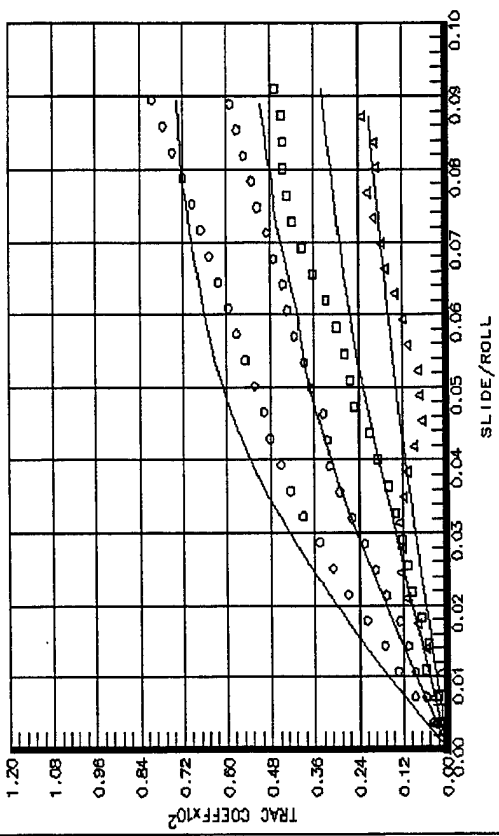


CP 90-715 ~300 Hatcol 3110

NEWTONIAN MODEL TYPE 1 op86.dat

| | 160N | 276N | 440N | 654N |
|---------|----------|-----------|-----------|-----------|
| 830MPa | 20.34M/S | 422K #228 | 5.757E-03 | 5.000E-03 |
| 998MPa | 20.34M/S | 422K #230 | 5.757E-03 | 5.000E-03 |
| 1163MPa | 20.34M/S | 422K #231 | 5.757E-03 | 5.000E-03 |
| 1328MPa | 20.34M/S | 422K #232 | 5.757E-03 | 5.000E-03 |

ALFA* 5.000E-03 5.000E-03 5.000E-03 5.000E-03
 BETA* 1.879E-01 1.879E-01 1.879E-01 1.879E-01



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13. Traction Data Set L: 91-119 Pennzane

Data set name: BP 91-119 Pennzane
Rolling radii [Disks 1 & 2] (in): 0.75 0.75
Crown radii [Disks 1 & 2] (in): 15.00 13.00

Number of data sets found = 156

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.37E-06 | bp80h #1 |
| 2 | 80.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.29E-06 | bp80h #2 |
| 3 | 80.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-05 | bp80h #3 |
| 4 | 80.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.55E-05 | bp80h #4 |
| 5 | 80.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.62E-06 | bp80h #5 |
| 6 | 80.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.46E-06 | bp80h #6 |
| 7 | 80.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.37E-05 | bp80h #7 |
| 8 | 80.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.78E-06 | bp80h #8 |
| 9 | 80.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.60E-06 | bp80h #9 |
| 10 | 80.00 | 1.35 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.38E-03 | bp80l #1 |
| 11 | 80.00 | 3.48 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.31E-04 | bp80l #2 |
| 12 | 80.00 | 8.45 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.92E-04 | bp80l #3 |
| 13 | 80.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.75E-05 | bp80l #4 |
| 14 | 80.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.04E-04 | bp80l #5 |
| 15 | 80.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.18E-03 | bp80l #6 |
| 16 | 80.00 | 1.35 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.26E-03 | bp80l #7 |
| 17 | 80.00 | 3.48 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.15E-04 | bp80l #8 |
| 18 | 80.00 | 8.45 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.13E-03 | bp80l #9 |
| 19 | 80.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.73E-04 | bp80l #10 |
| 20 | 80.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.98E-04 | bp80l #11 |
| 21 | 80.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-03 | bp80l #12 |
| 22 | 80.00 | 1.35 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.60E-04 | bp80l #13 |
| 23 | 80.00 | 3.48 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.64E-05 | bp80l #14 |
| 24 | 80.00 | 8.45 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.73E-04 | bp80l #15 |
| 25 | 80.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.77E-05 | bp80l #16 |
| 26 | 80.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.44E-05 | bp80l #17 |
| 27 | 80.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.15E-04 | bp80l #18 |
| 28 | 80.00 | 1.35 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | bp80l #19 |
| 29 | 80.00 | 3.48 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.66E-05 | bp80l #20 |
| 30 | 80.00 | 8.45 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.69E-05 | bp80l #21 |
| 31 | 80.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.68E-06 | bp80l #22 |
| 32 | 80.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-05 | bp80l #23 |
| 33 | 80.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-05 | bp80l #24 |
| 34 | 80.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.70E-06 | bp80lx #1 |
| 35 | 80.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.18E-06 | bp80lx #2 |
| 36 | 80.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.81E-06 | bp80lx #3 |
| 37 | 100.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.38E-05 | bp100h #1 |
| 38 | 100.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.16E-06 | bp100h #2 |
| 39 | 100.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.11E-05 | bp100h #3 |
| 40 | 100.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-05 | bp100h #4 |
| 41 | 100.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.62E-06 | bp100h #5 |
| 42 | 100.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.29E-05 | bp100h #6 |
| 43 | 100.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-05 | bp100h #7 |
| 44 | 100.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.48E-06 | bp100h #8 |
| 45 | 100.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.48E-06 | bp100h #9 |
| 46 | 100.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.18E-04 | bp100l #1 |
| 47 | 100.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.16E-04 | bp100l #2 |
| 48 | 100.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.59E-03 | bp100l #3 |
| 49 | 100.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.86E-05 | bp100l #4 |
| 50 | 100.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-04 | bp100l #5 |

Data set: BP 91-119 Pennzanecontinued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 100.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-04 | bp100l #6 |
| 52 | 100.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-05 | bp100l #7 |
| 53 | 100.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.81E-05 | bp100l #8 |
| 54 | 100.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-04 | bp100l #9 |
| 55 | 100.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.98E-06 | bp100l #10 |
| 56 | 100.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.45E-05 | bp100l #11 |
| 57 | 100.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.28E-06 | bp100l #12 |
| 58 | 100.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.41E-05 | bp100l #13 |
| 59 | 100.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.79E-06 | bp100l #14 |
| 60 | 100.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.98E-06 | bp100l #15 |
| 61 | 150.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.00E-06 | bp150h #1 |
| 62 | 150.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.91E-06 | bp150h #2 |
| 63 | 150.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.01E-06 | bp150h #3 |
| 64 | 150.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.37E-06 | bp150h #4 |
| 65 | 150.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.78E-05 | bp150h #5 |
| 66 | 150.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.39E-06 | bp150h #6 |
| 67 | 150.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.01E-06 | bp150h #7 |
| 68 | 150.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.18E-06 | bp150h #8 |
| 69 | 150.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.71E-06 | bp150h #9 |
| 70 | 150.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.27E-04 | bp150l #1 |
| 71 | 150.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.45E-04 | bp150l #2 |
| 72 | 150.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.49E-03 | bp150l #3 |
| 73 | 150.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.35E-04 | bp150l #4 |
| 74 | 150.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.23E-05 | bp150l #5 |
| 75 | 150.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.30E-05 | bp150l #6 |
| 76 | 150.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.82E-05 | bp150l #7 |
| 77 | 150.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.94E-05 | bp150l #8 |
| 78 | 150.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.40E-05 | bp150l #9 |
| 79 | 150.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.57E-06 | bp150l #10 |
| 80 | 150.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.35E-05 | bp150l #11 |
| 81 | 150.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.40E-05 | bp150l #12 |
| 82 | 150.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.88E-05 | bp150l #13 |
| 83 | 150.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.02E-05 | bp150l #14 |
| 84 | 150.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.41E-06 | bp150l #15 |
| 85 | 200.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.89E-05 | bp200h #1 |
| 86 | 200.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.24E-07 | bp200h #2 |
| 87 | 200.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.07E-05 | bp200h #3 |
| 88 | 200.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.90E-06 | bp200h #4 |
| 89 | 200.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.58E-06 | bp200h #5 |
| 90 | 200.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.98E-06 | bp200h #6 |
| 91 | 200.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | bp200h #7 |
| 92 | 200.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.68E-07 | bp200h #8 |
| 93 | 200.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-06 | bp200h #9 |
| 94 | 200.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.27E-05 | bp200l #1 |
| 95 | 200.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-04 | bp200l #2 |
| 96 | 200.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-04 | bp200l #3 |
| 97 | 200.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.11E-05 | bp200l #4 |
| 98 | 200.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.61E-04 | bp200l #5 |
| 99 | 200.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.37E-04 | bp200l #6 |
| 100 | 200.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.24E-06 | bp200l #7 |
| 101 | 200.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.45E-06 | bp200l #8 |
| 102 | 200.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.90E-05 | bp200l #9 |
| 103 | 200.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.51E-05 | bp200l #10 |
| 104 | 200.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.08E-06 | bp200l #11 |
| 105 | 200.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.07E-06 | bp200l #12 |
| 106 | 200.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.99E-06 | bp200l #13 |
| 107 | 200.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.92E-06 | bp200l #14 |
| 108 | 200.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.42E-05 | bp200l #15 |
| 109 | 250.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.18E-06 | bp250h #1 |
| 110 | 250.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.28E-07 | bp250h #2 |
| 111 | 250.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.32E-06 | bp250h #3 |
| 112 | 250.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.18E-05 | bp250h #4 |
| 113 | 250.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.90E-07 | bp250h #5 |
| 114 | 250.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.85E-06 | bp250h #6 |
| 115 | 250.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.21E-06 | bp250h #7 |
| 116 | 250.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.25E-07 | bp250h #8 |
| 117 | 250.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.96E-06 | bp250h #9 |
| 118 | 250.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.36E-04 | bp250l #1 |
| 119 | 250.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.72E-04 | bp250l #2 |
| 120 | 250.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.77E-04 | bp250l #3 |

Data set: BP 91-119 Pennzanecontinued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 250.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.03E-05 | bp250l #4 |
| 122 | 250.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.47E-05 | bp250l #5 |
| 123 | 250.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.83E-05 | bp250l #6 |
| 124 | 250.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.72E-06 | bp250l #7 |
| 125 | 250.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.08E-06 | bp250l #8 |
| 126 | 250.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.36E-05 | bp250l #9 |
| 127 | 250.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-05 | bp250l #10 |
| 128 | 250.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.63E-06 | bp250l #11 |
| 129 | 250.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.71E-07 | bp250l #12 |
| 130 | 250.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.99E-06 | bp250l #13 |
| 131 | 250.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.16E-07 | bp250l #14 |
| 132 | 250.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-06 | bp250l #15 |
| 133 | 300.00 | 20.52 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.61E-06 | bp300h #1 |
| 134 | 300.00 | 71.64 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.71E-07 | bp300h #2 |
| 135 | 300.00 | 171.75 | 4830.00 | 5330.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-07 | bp300h #3 |
| 136 | 300.00 | 20.52 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.21E-06 | bp300h #4 |
| 137 | 300.00 | 71.64 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.28E-07 | bp300h #5 |
| 138 | 300.00 | 171.75 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.75E-07 | bp300h #6 |
| 139 | 300.00 | 20.52 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.76E-06 | bp300h #7 |
| 140 | 300.00 | 71.64 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.83E-07 | bp300h #8 |
| 141 | 300.00 | 171.75 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.81E-07 | bp300h #9 |
| 142 | 300.00 | 20.52 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.34E-04 | bp300l #1 |
| 143 | 300.00 | 71.64 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.52E-04 | bp300l #2 |
| 144 | 300.00 | 171.75 | 68.00 | 84.00 | 76.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.94E-04 | bp300l #3 |
| 145 | 300.00 | 20.52 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.07E-05 | bp300l #4 |
| 146 | 300.00 | 71.64 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-05 | bp300l #5 |
| 147 | 300.00 | 171.75 | 137.00 | 167.00 | 152.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.63E-05 | bp300l #6 |
| 148 | 300.00 | 20.52 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.19E-05 | bp300l #7 |
| 149 | 300.00 | 71.64 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.24E-06 | bp300l #8 |
| 150 | 300.00 | 171.75 | 318.00 | 368.00 | 343.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.62E-06 | bp300l #9 |
| 151 | 300.00 | 20.52 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.08E-06 | bp300l #10 |
| 152 | 300.00 | 71.64 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.93E-07 | bp300l #11 |
| 153 | 300.00 | 171.75 | 1208.00 | 1388.00 | 1298.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.93E-07 | bp300l #12 |
| 154 | 300.00 | 20.52 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.15E-06 | bp300l #13 |
| 155 | 300.00 | 71.64 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.21E-08 | bp300l #14 |
| 156 | 300.00 | 171.75 | 2429.00 | 2689.00 | 2559.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.39E-07 | bp300l #15 |

Summary of Select Data Files

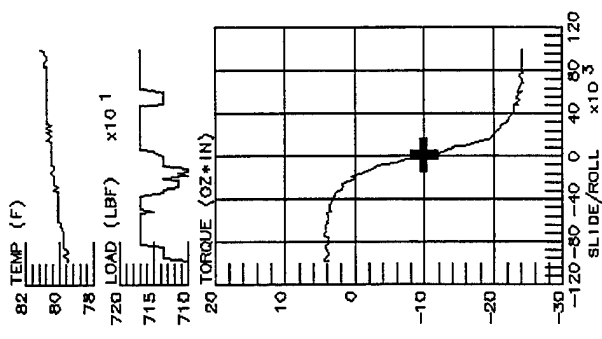
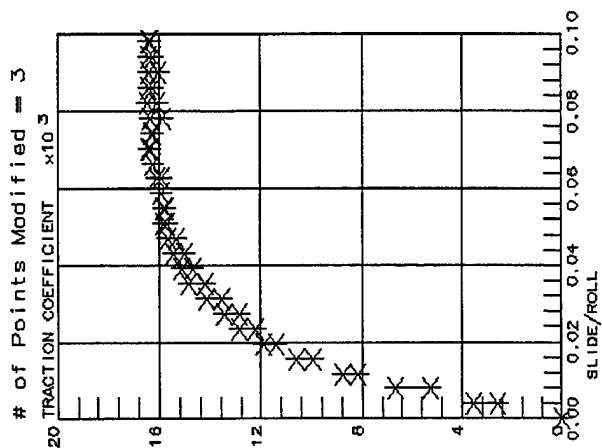
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| bp2.dat | 80.00 | 2559.00 | 35 36 |
| bp3.dat | 80.00 | 5080.00 | 2 3 |
| bp4.dat | 80.00 | 7639.00 | 5 6 |
| bp5.dat | 80.00 | 10198.00 | 8 9 |
| bp6.dat | 100.00 | 1298.00 | 56 57 |
| bp7.dat | 100.00 | 2559.00 | 59 60 |
| bp8.dat | 100.00 | 5080.00 | 38 39 |
| bp9.dat | 100.00 | 7639.00 | 41 42 |
| bp10.dat | 100.00 | 10198.00 | 44 45 |
| bp11.dat | 150.00 | 1298.00 | 80 81 |
| bp12.dat | 150.00 | 2559.00 | 83 84 |
| bp13.dat | 150.00 | 5080.00 | 62 63 |
| bp14.dat | 150.00 | 7639.00 | 65 66 |
| bp15.dat | 150.00 | 10198.00 | 68 69 |
| bp16.dat | 200.00 | 1298.00 | 104 105 |
| bp17.dat | 200.00 | 2559.00 | 107 108 |
| bp18.dat | 200.00 | 5080.00 | 86 87 |
| bp19.dat | 200.00 | 7639.00 | 89 90 |
| bp20.dat | 200.00 | 10198.00 | 92 93 |
| bp21.dat | 250.00 | 1298.00 | 128 129 |
| bp22.dat | 250.00 | 2559.00 | 131 132 |
| bp23.dat | 250.00 | 5080.00 | 110 111 |
| bp24.dat | 250.00 | 7639.00 | 113 114 |
| bp25.dat | 250.00 | 10198.00 | 116 117 |
| bp26.dat | 300.00 | 1298.00 | 152 153 |
| bp27.dat | 300.00 | 2559.00 | 155 156 |
| bp28.dat | 300.00 | 5080.00 | 134 135 |
| bp29.dat | 300.00 | 7639.00 | 137 138 |
| bp30.dat | 300.00 | 10198.00 | 140 141 |

#2

BP 91-119 Pennzane
80F 72LBF 5080RPM

2 FILE: bp80h

of Points Modified = 3

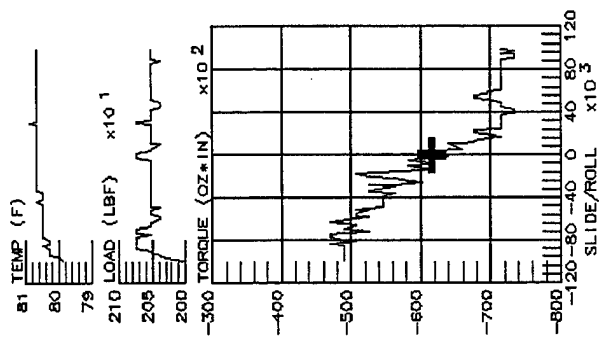
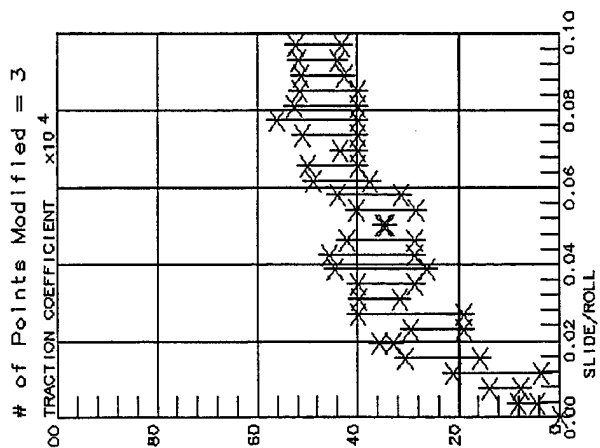


#4

BP 91-119 Pennzane
80F 21LBF 7639RPM

4 FILE: bp80h

of Points Modified = 3

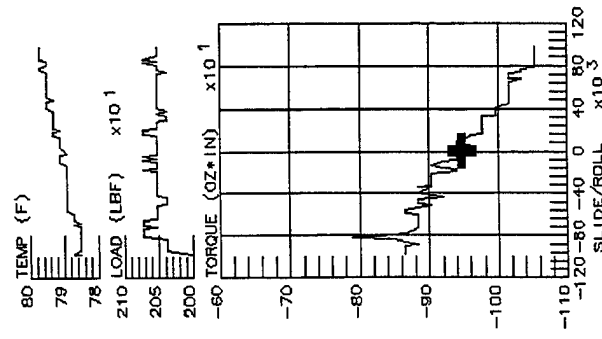
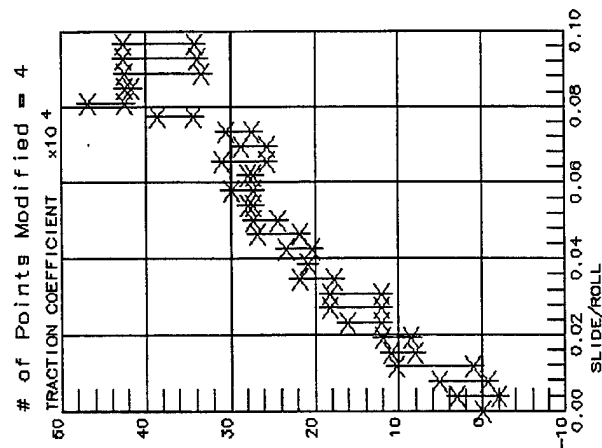


#1

BP 91-119 Pennzane
80F 21LBF 5080RPM

1 FILE: bp80h

of Points Modified = 4

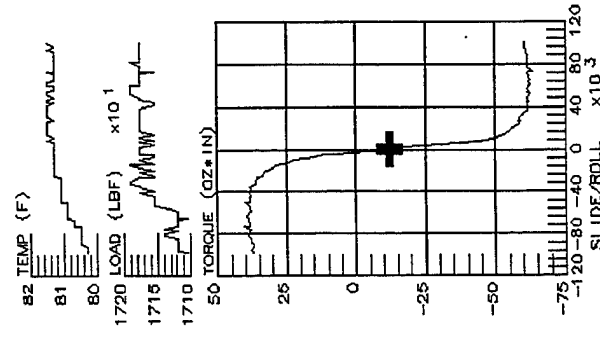
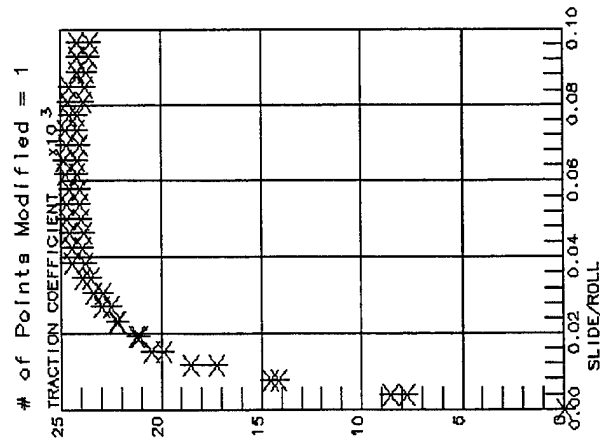


#3

BP 91-119 Pennzane
80F 172LBF 5080RPM

3 FILE: bp80h

of Points Modified = 1



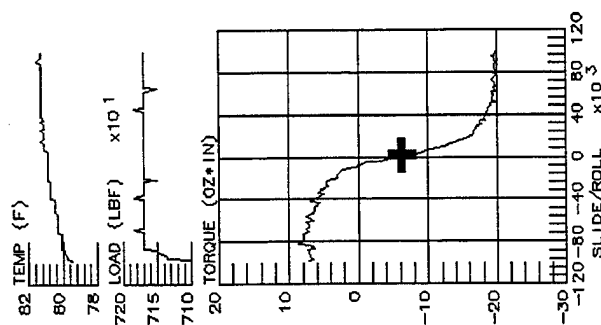
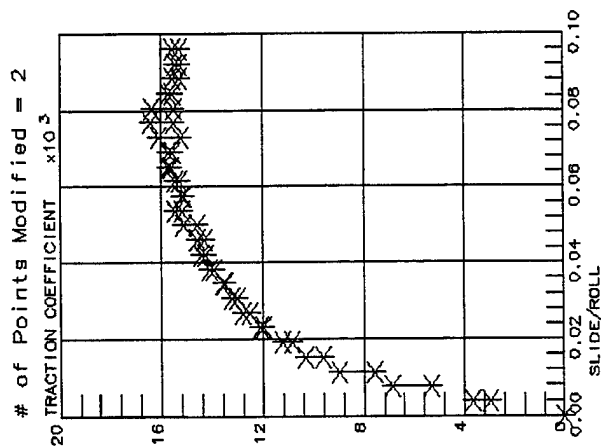
TRACTION MEASUREMENT

BP 91-119 Pennzane
80F 72LBF 7639RPM

5 FILE: bp80h

#5

of Points Modified = 2

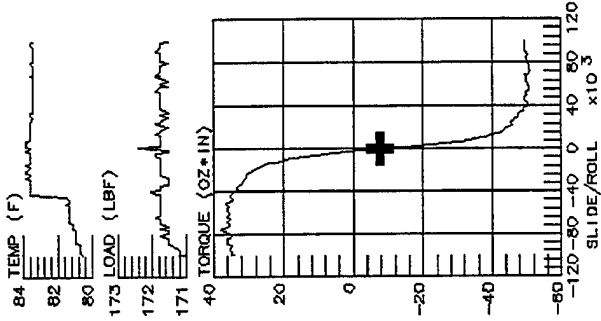
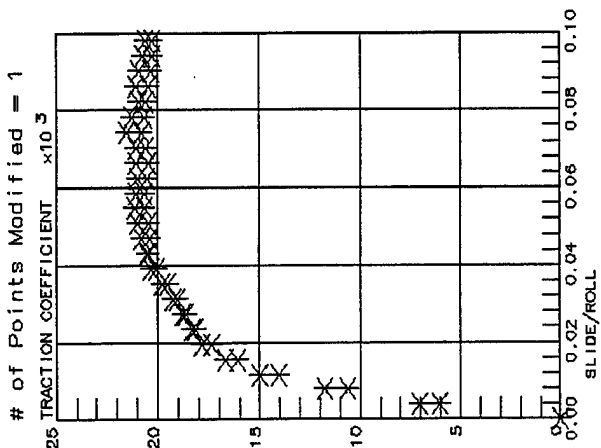


BP 91-119 Pennzane
80F 172LBF 7639RPM

6 FILE: bp80h

#6

of Points Modified = 1

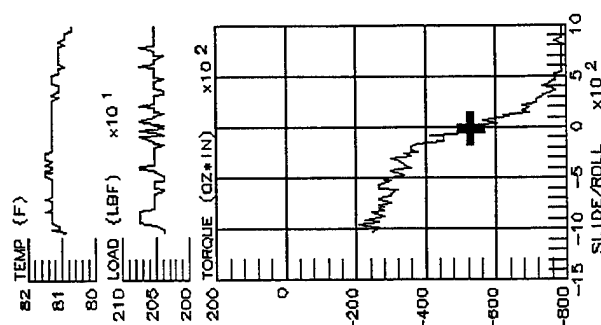
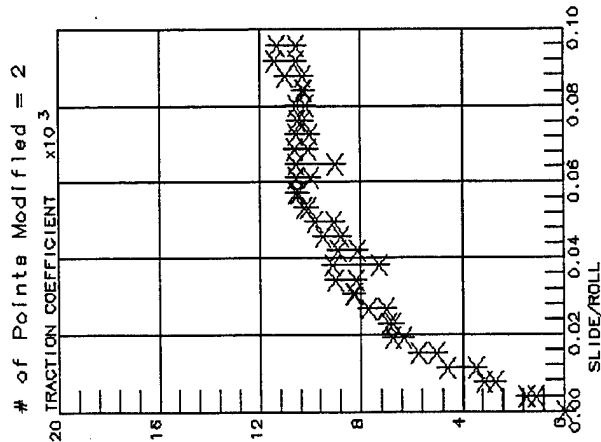


BP 91-119 Pennzane
80F 21LBF 1019RPM

7 FILE: bp80h

#7

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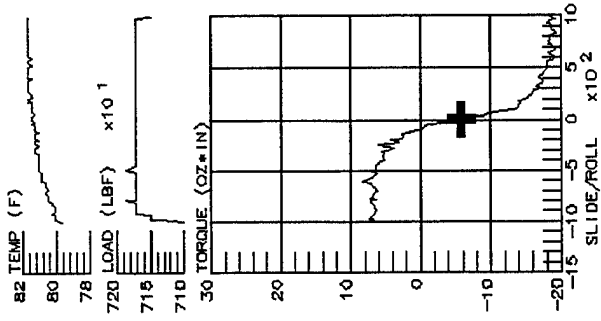
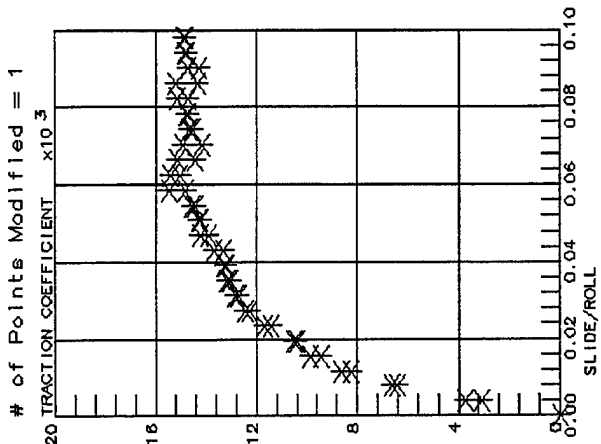


BP 91-119 Pennzane
80F 72LBF 1019RPM

8 FILE: bp80h

#8

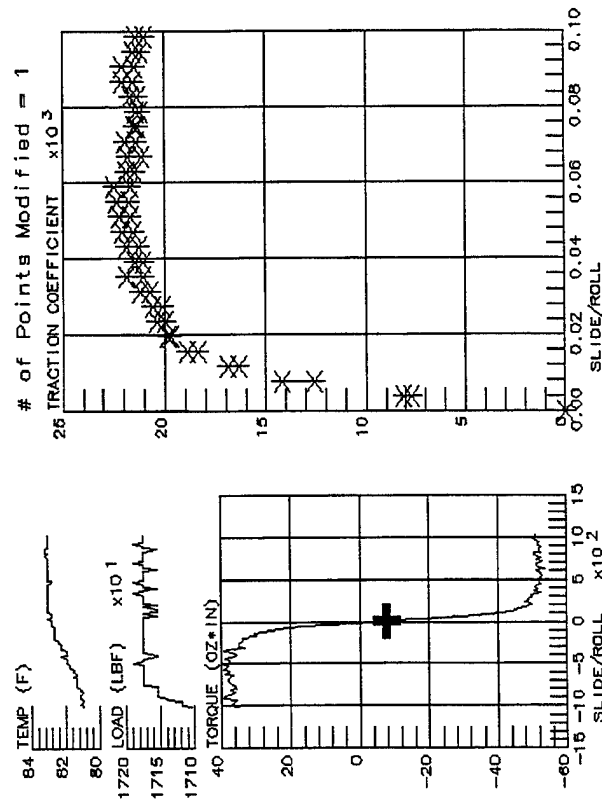
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BP 91-119 Pennzane
80F 172LBF 1019RPM

9 FILE: bp80b

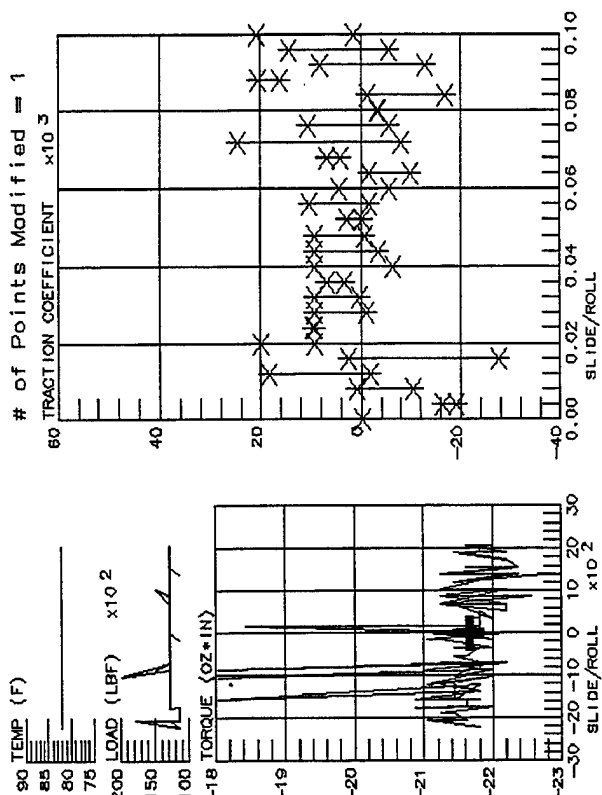
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BP 91-119 Pennzane
80F 1LBF 76RPM

1 FILE: bp801

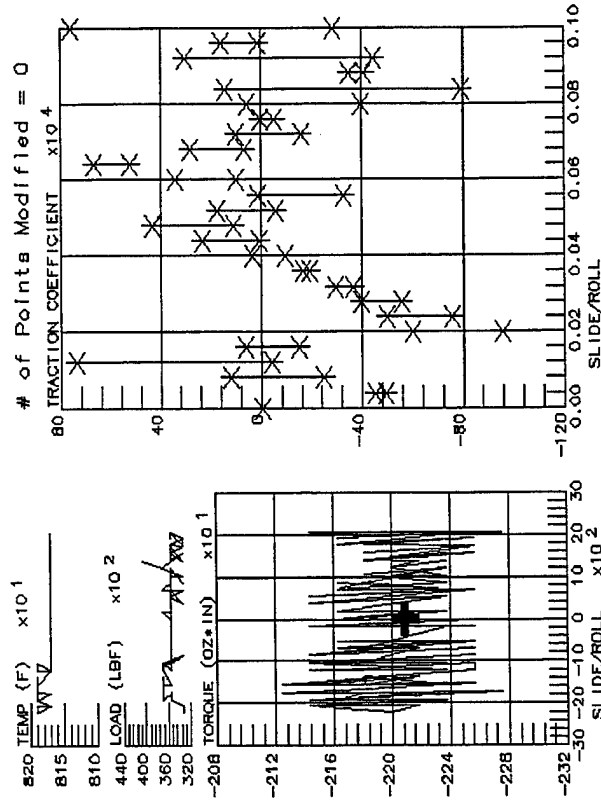
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BP 91-119 Pennzane
80F 3LBF 76RPM

2 FILE: bp801

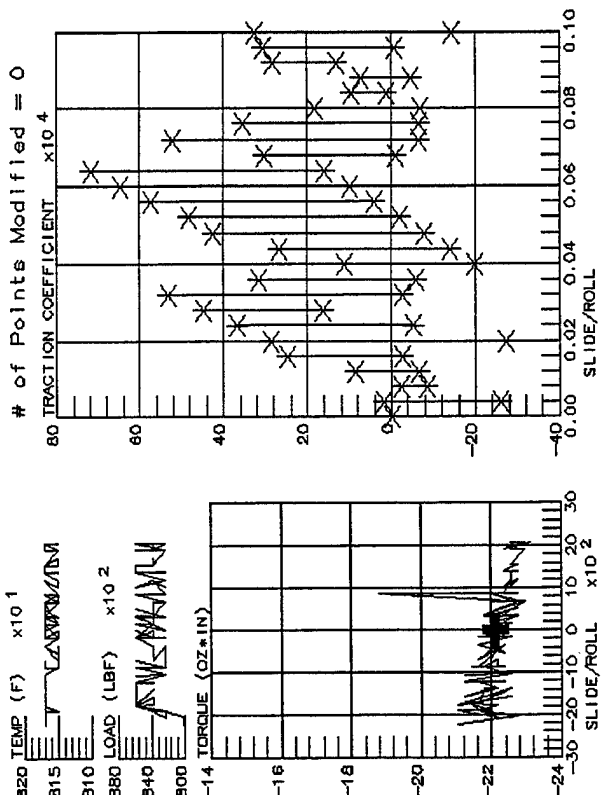
of Points Modified = 0



BP 91-119 Pennzane
80F 8LBF 76RPM

3 FILE: bp801

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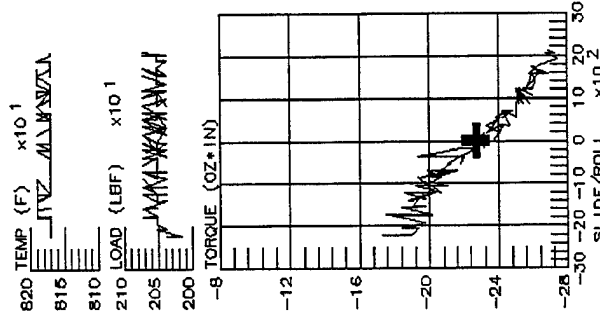
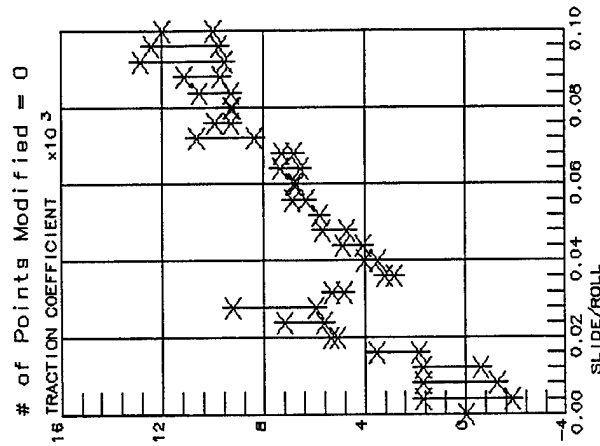


BP 91-119 Pennzane
80F 21LBF 76RPM

4 FILE: bp801

#13

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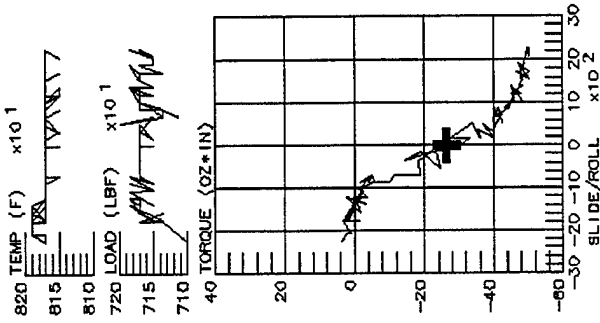
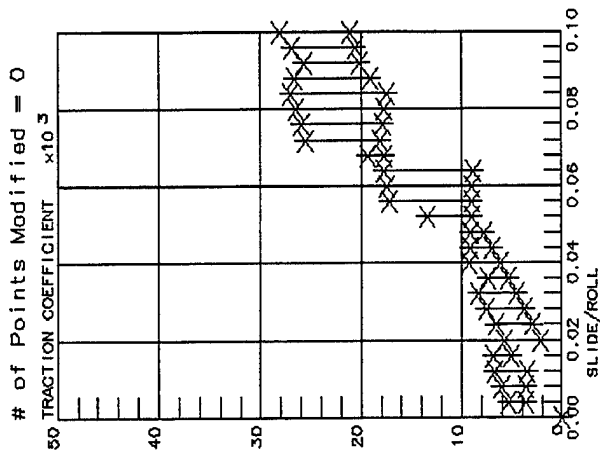


BP 91-119 Pennzane
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5 FILE: bp801

#14

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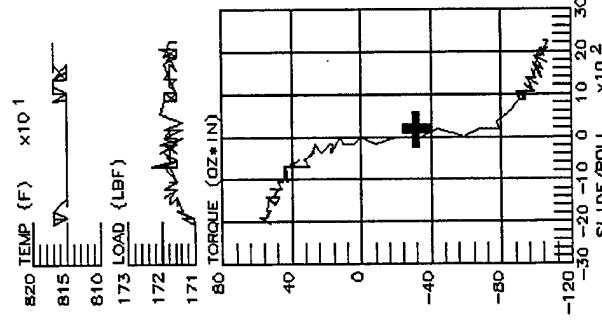
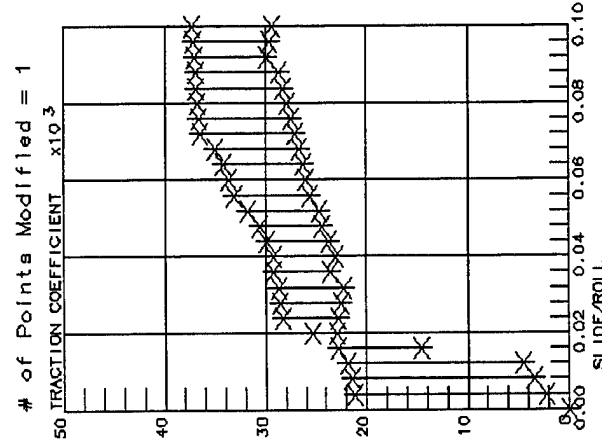


BP 91-119 Pennzane
80F 172LBF 76RPM

6 FILE: bp801

#15

of Points Modified = 1

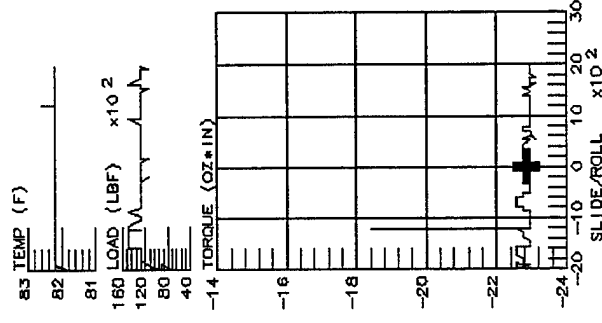
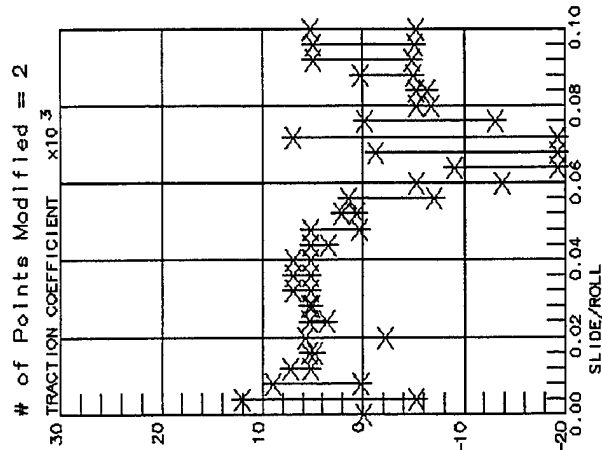


BP 91-119 Pennzane
80F 1LBF 152RPM

7 FILE: bp801

#16

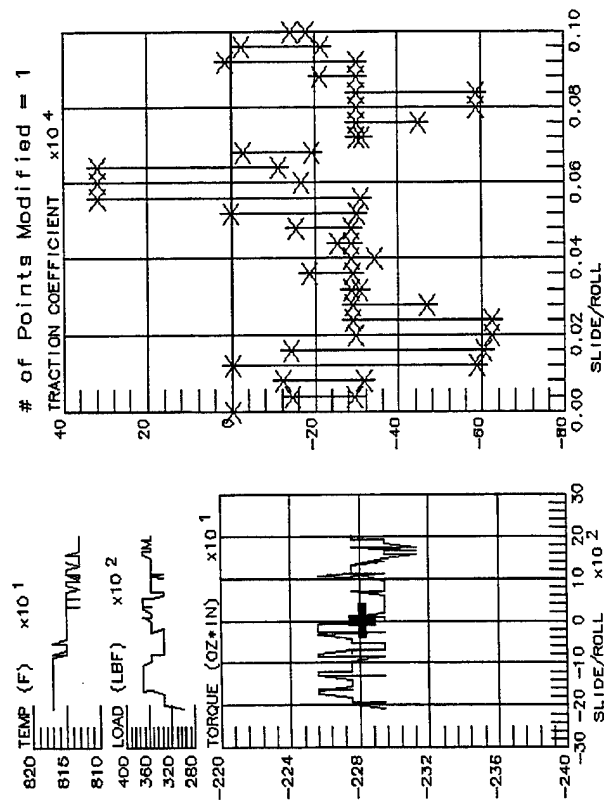
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BP 91-119 Pennzane
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#17
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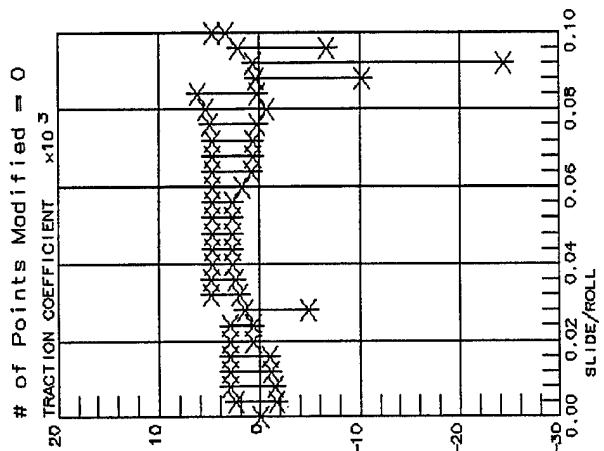
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BP 91-119 Pennzane
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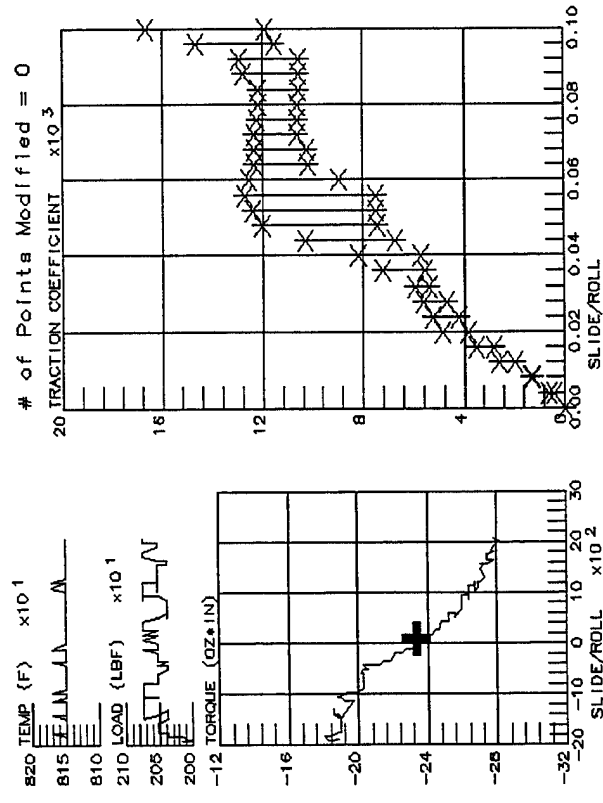
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BP 91-119 Pennzane
80F 21LBF 152RPM

#19
FILE: bp801

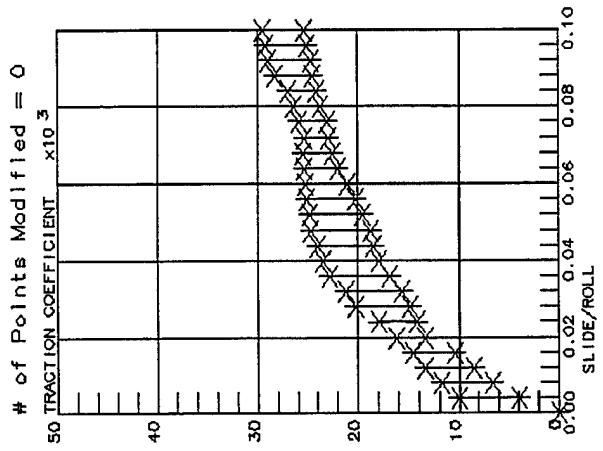
of Points Modified = 0



BP 91-119 Pennzane
80F 72LBF 152RPM

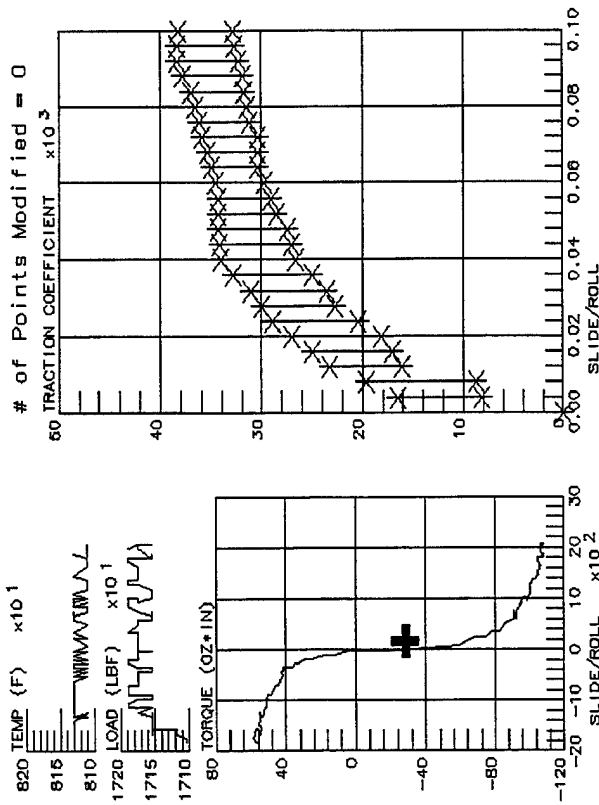
#20
FILE: bp801

of Points Modified = 0



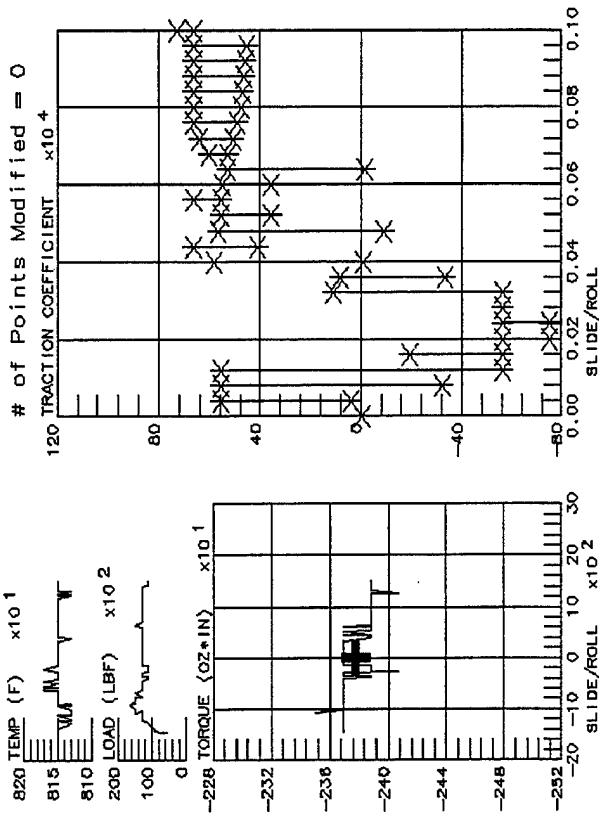
BP 91-119 Pennzane
80F 172LBF 152RPM

#21
12 FILE: bp801



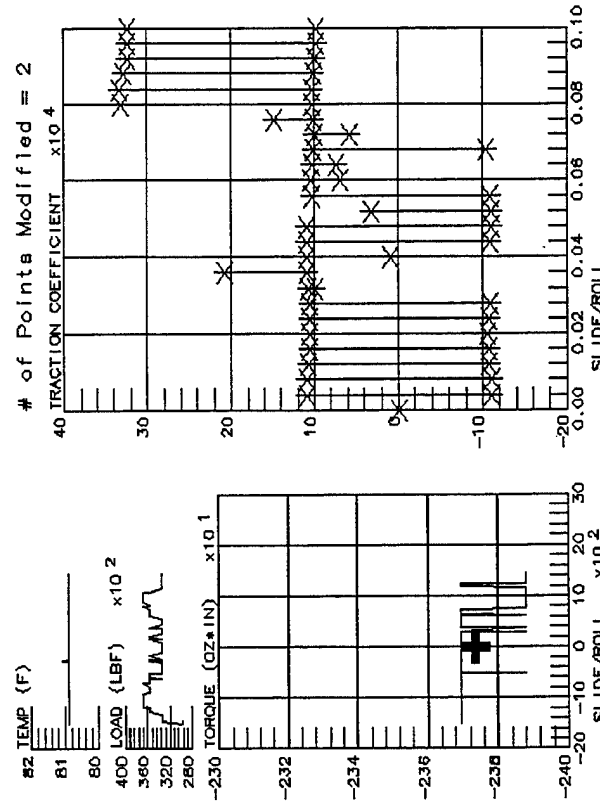
BP 91-119 Pennzane
80F 1LBF 343RPM

#22
13 FILE: bp801



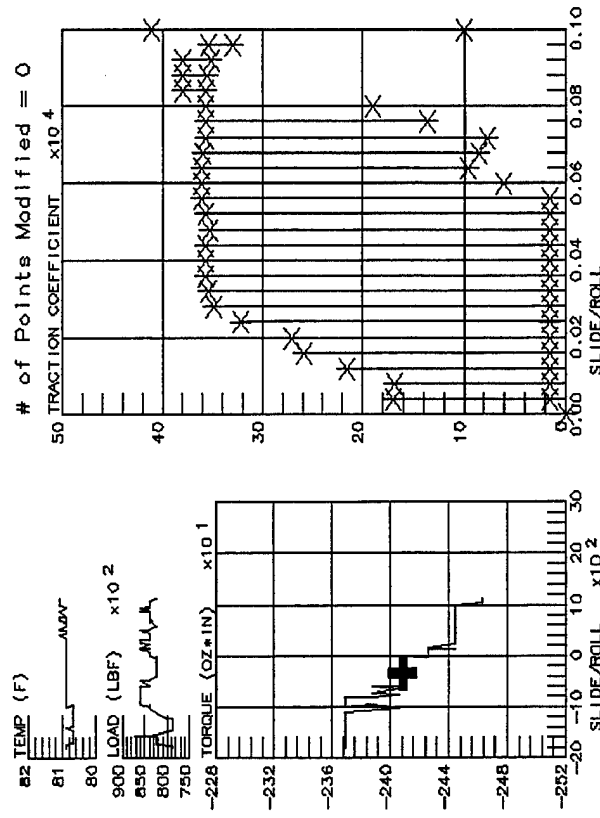
BP 91-119 Pennzane
80F 3LBF 343RPM

#23
14 FILE: bp801



BP 91-119 Pennzane
80F 8LBF 343RPM

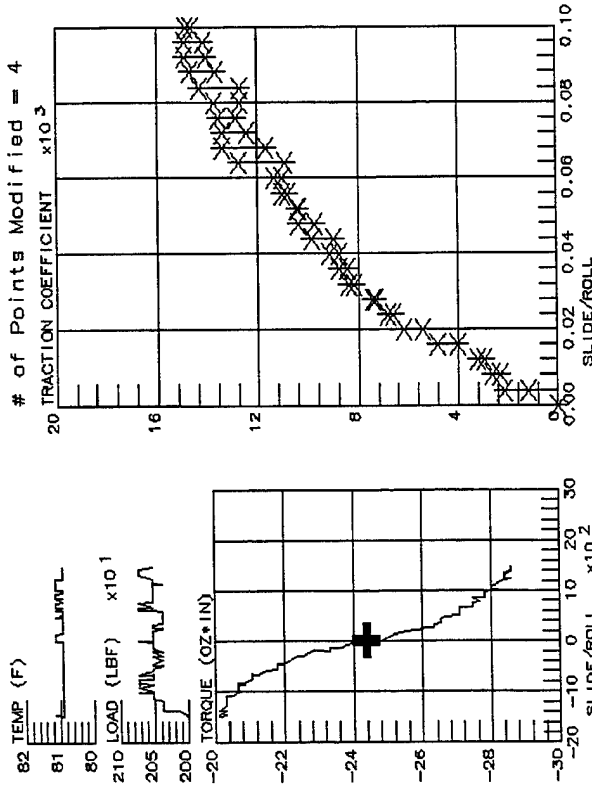
#24
15 FILE: bp801



BP 91-119 Pennzane
80F 21LBF 343RPM

#25
16 FILE: bp801

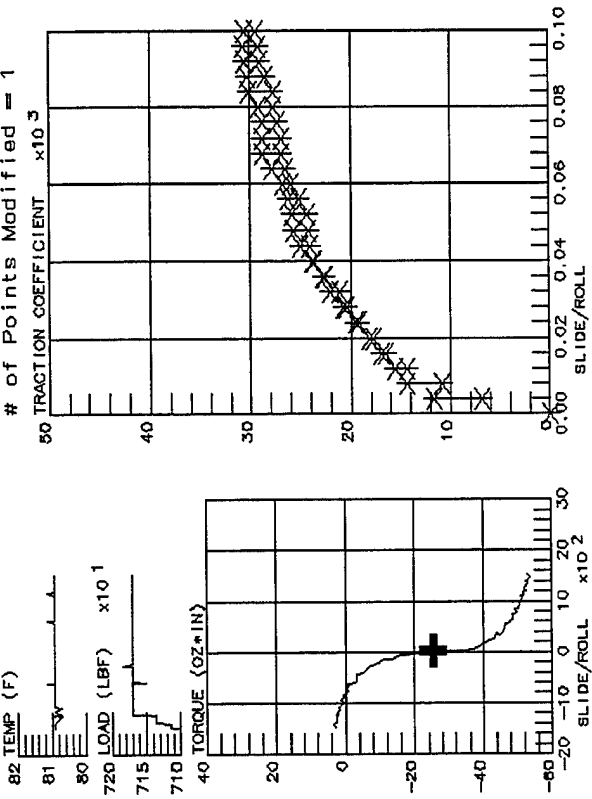
of Points Modified = 4



BP 91-119 Pennzane
80F 72LBF 343RPM

#26
17 FILE: bp801

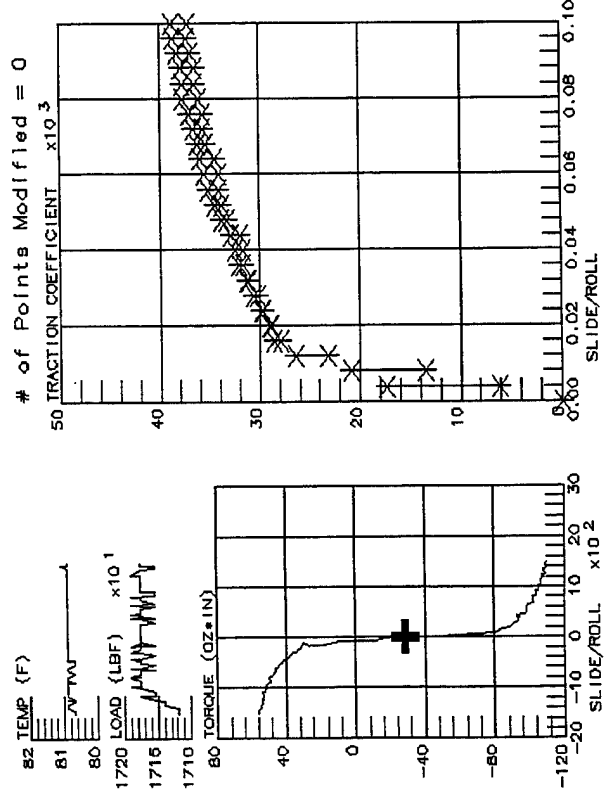
of Points Modified = 1



BP 91-119 Pennzane
80F 172LBF 343RPM

#27
18 FILE: bp801

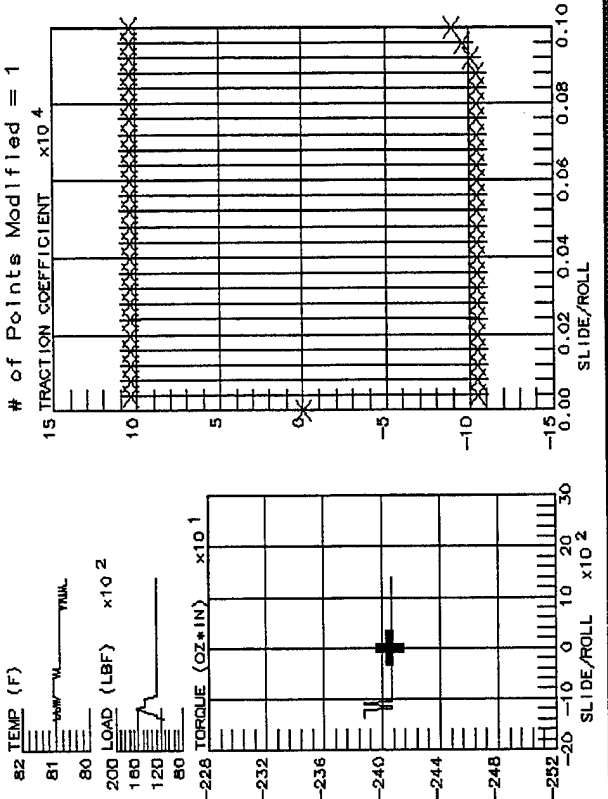
of Points Modified = 0



BP 91-119 Pennzane
80F 1LBF 1298RPM

#28
19 FILE: bp801

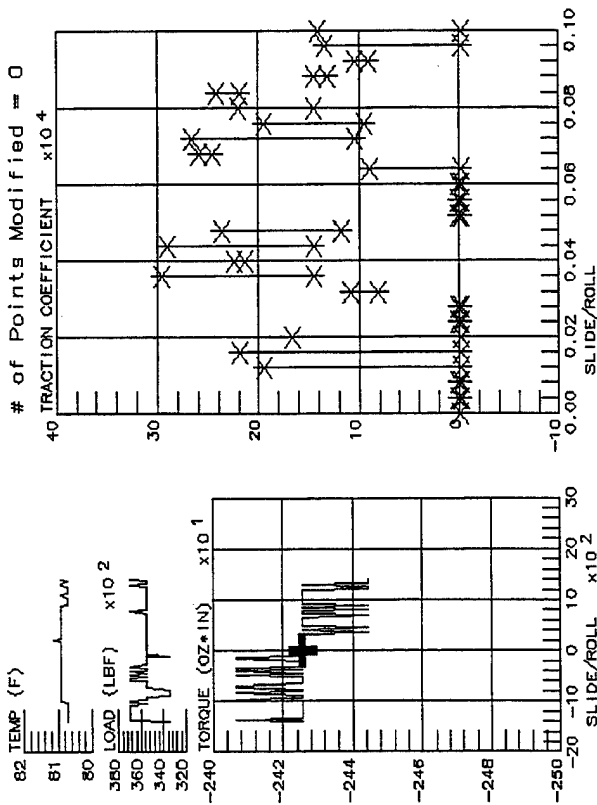
of Points Modified = 1



BP 91-119 Pennzane
80F 3LBF 1298RPM

#20 FILE: bp801

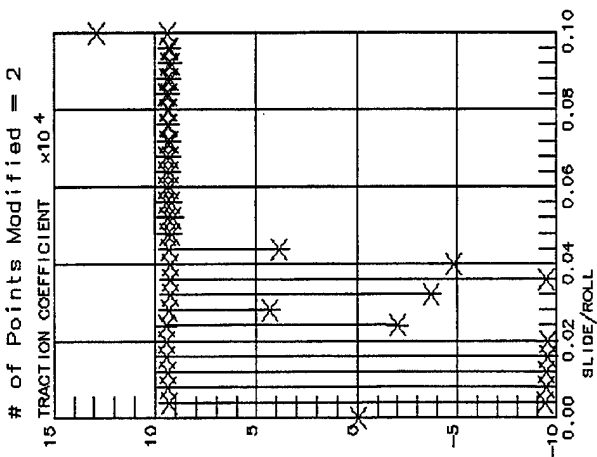
of Points Modified = 0



BP 91-119 Pennzane
80F 8LBF 1298RPM

#21 FILE: bp801

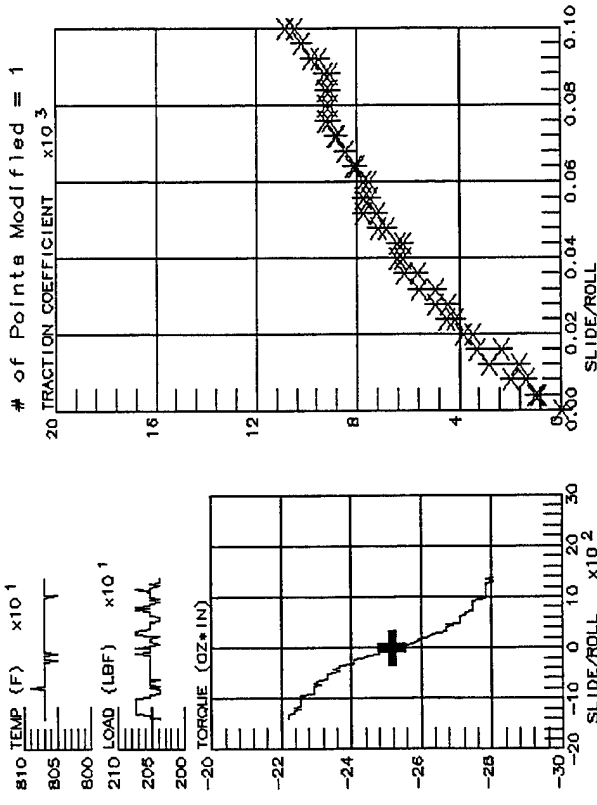
of Points Modified = 2



BP 91-119 Pennzane
80F 21LBF 1298RPM

#22 FILE: bp801

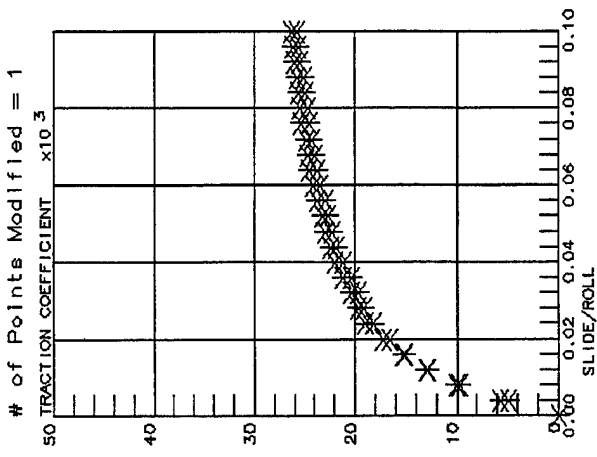
of Points Modified = 1



BP 91-119 Pennzane
80F 72LBF 1298RPM

#23 FILE: bp801

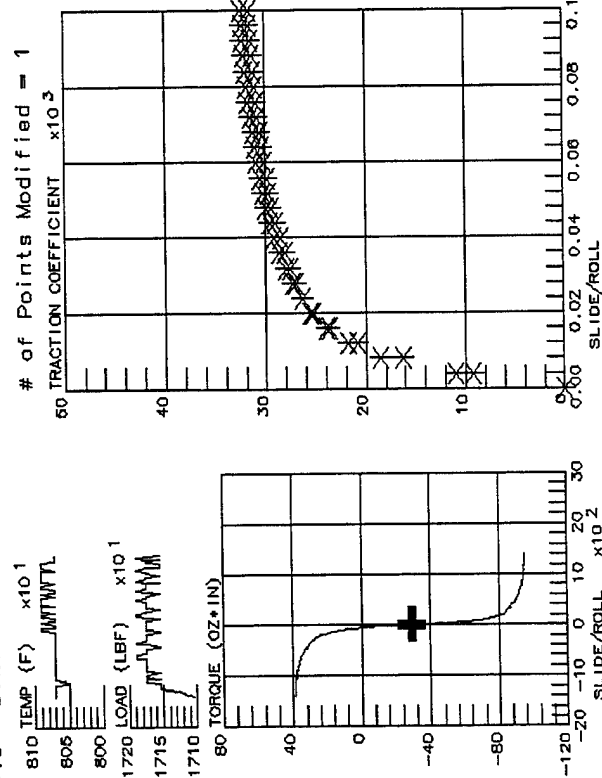
of Points Modified = 1



BP 91-119 Pennzane
80F 172LBF 1296RPM

#33
24 FILE: bp801

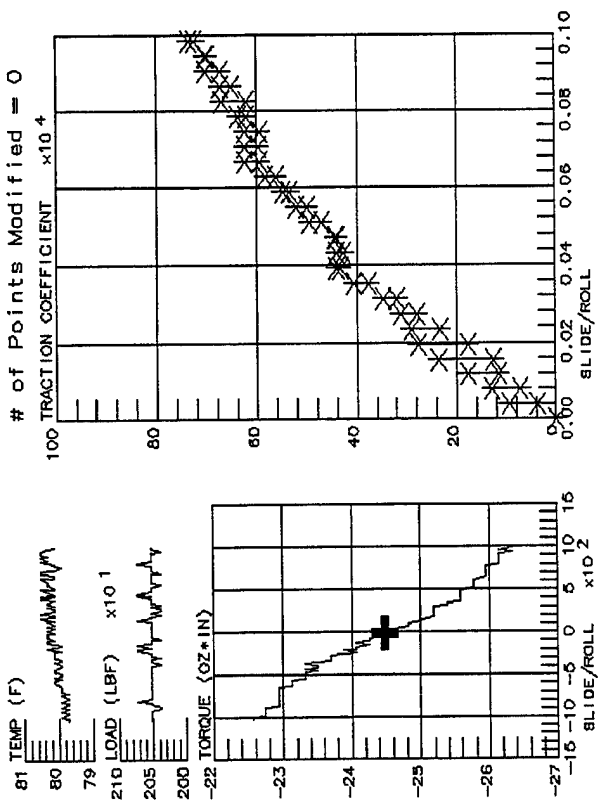
of Points Modified = 1



BP 91-119 Pennzane
80F 21LBF 2559RPM

#34
1 FILE: bp801x

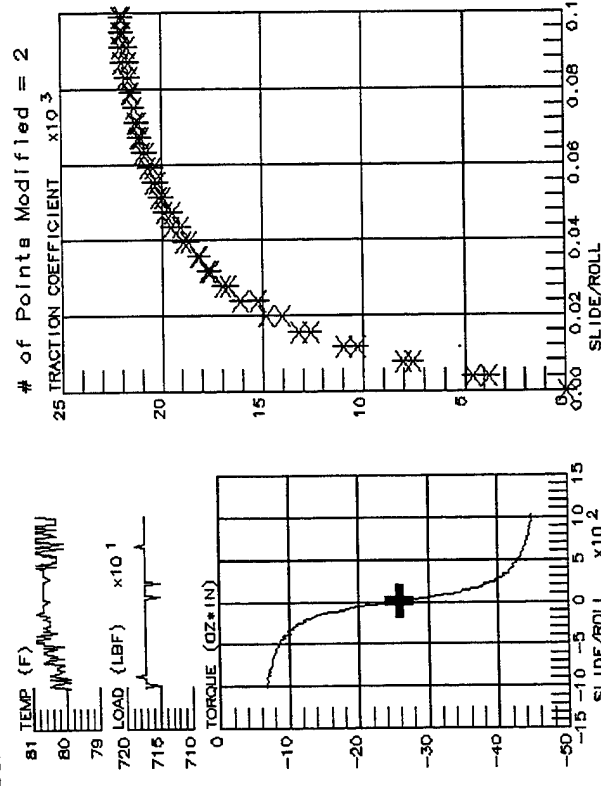
of Points Modified = 0



BP 91-119 Pennzane
80F 72LBF 2559RPM

#35
2 FILE: bp801x

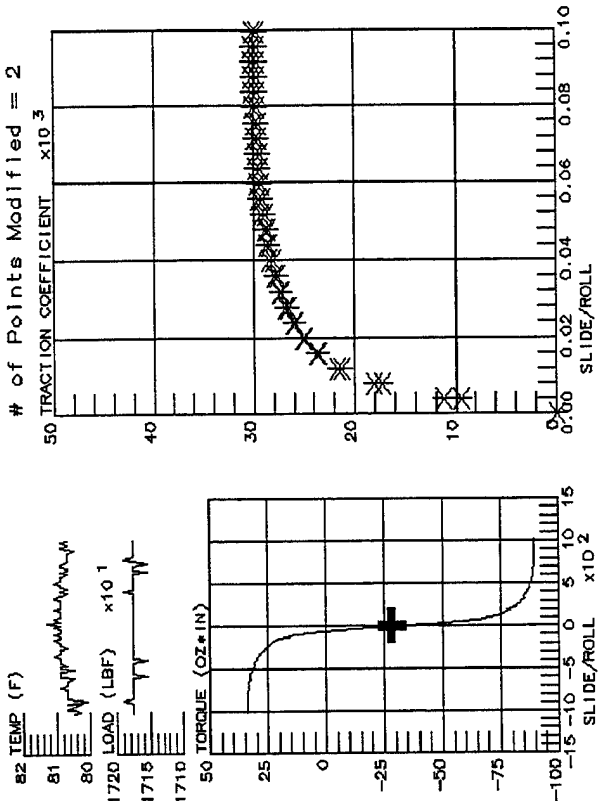
of Points Modified = 2

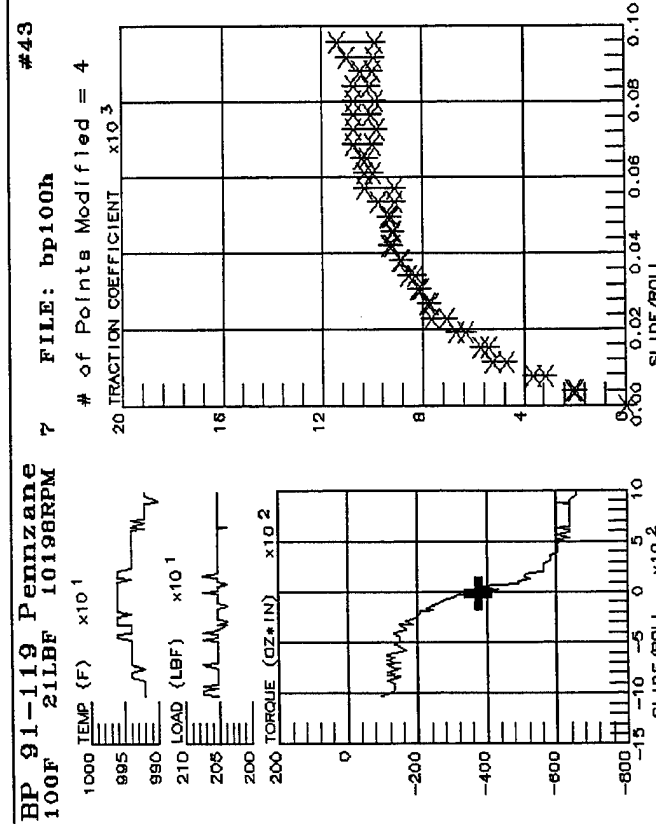
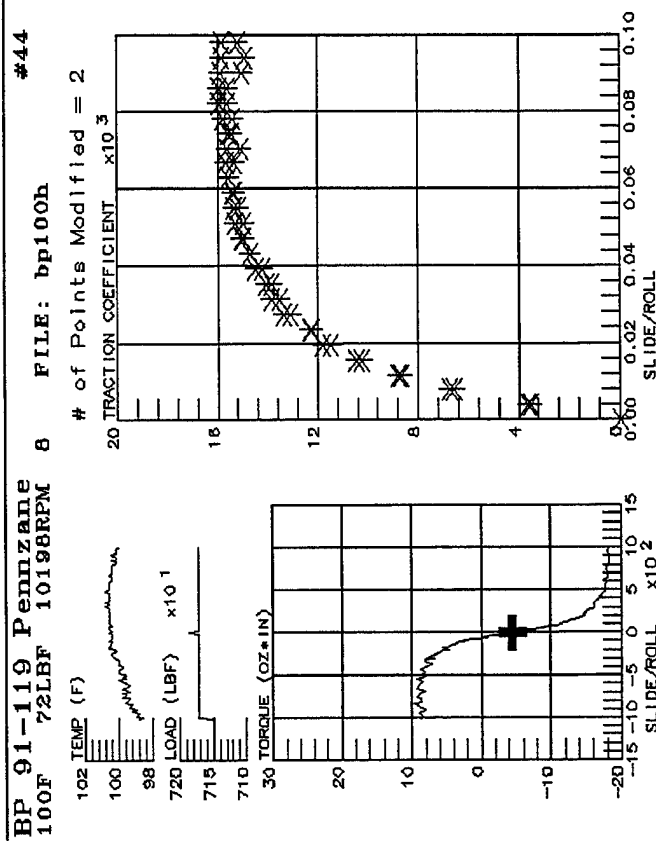
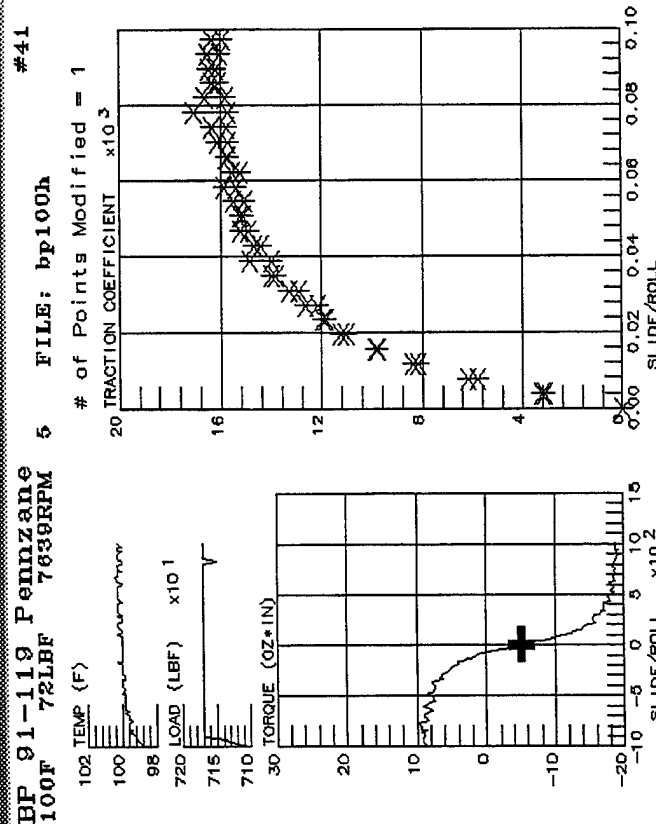
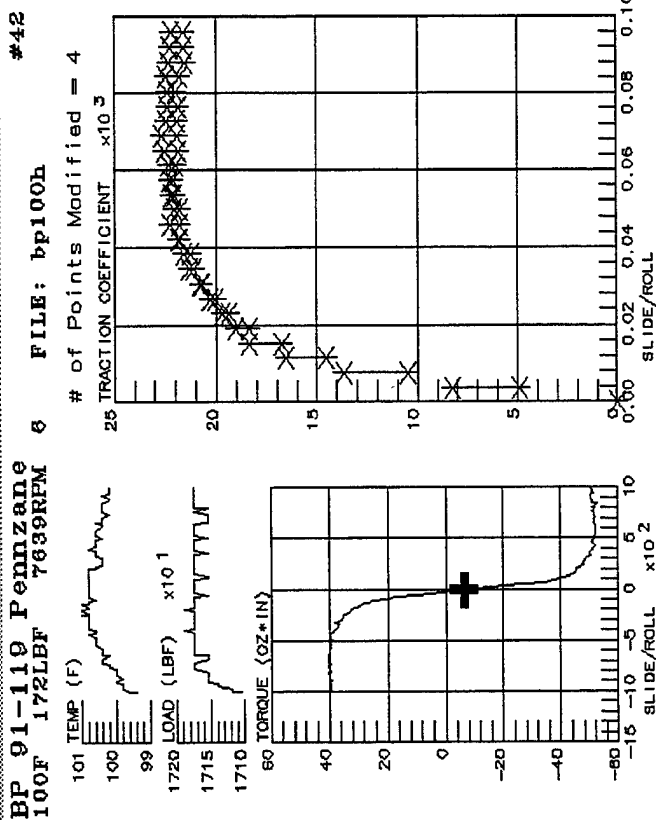


BP 91-119 Pennzane
80F 172LBF 2559RPM

#36
3 FILE: bp801x

of Points Modified = 2

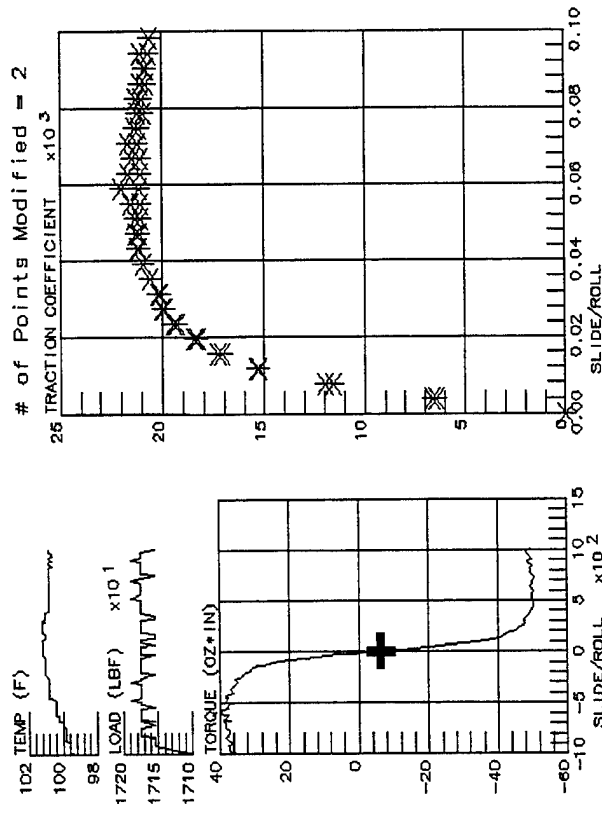




BP 91-119 Pennzane
100F 172LBF 10198RPM

9 FILE: bp100h

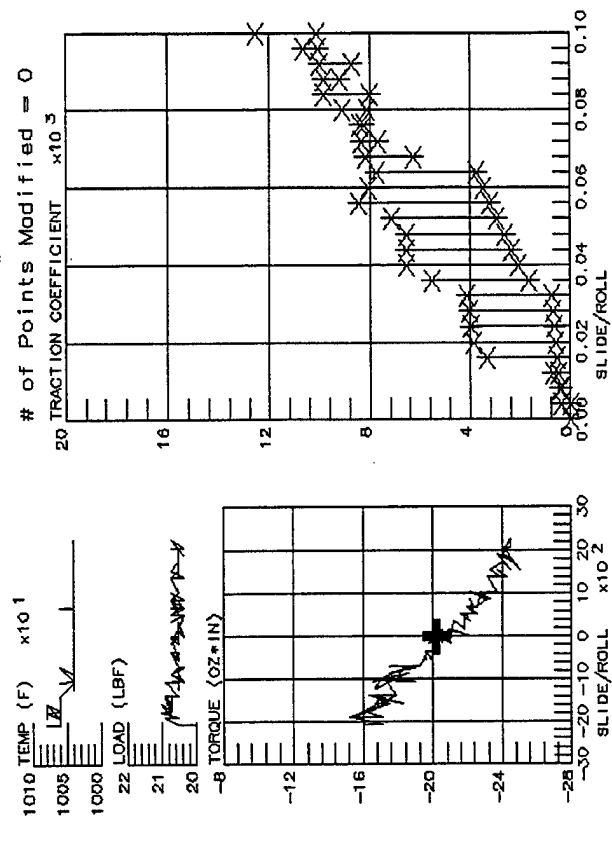
#45



BP 91-119 Pennzane
100F 21LBF 76RPM

1 FILE: bp100l

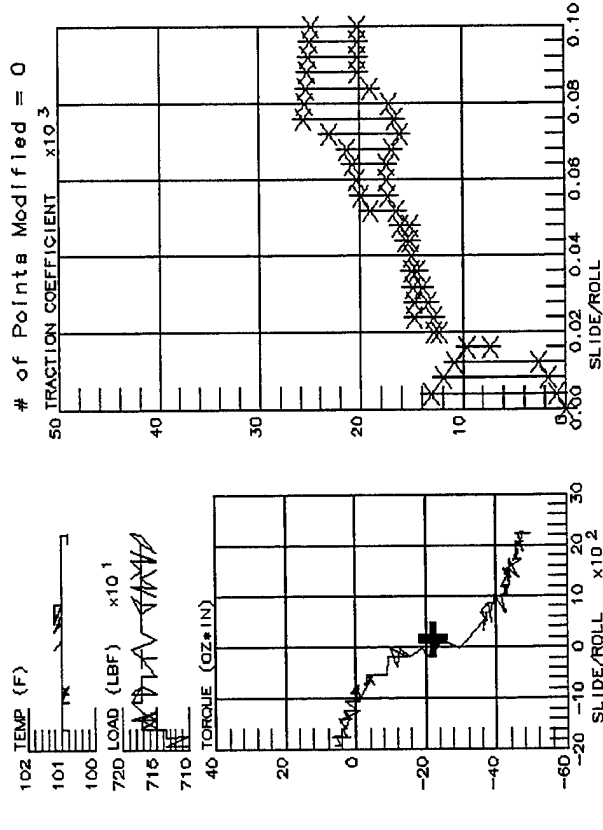
#46



BP 91-119 Pennzane
100F 72LBF 76RPM

2 FILE: bp100l

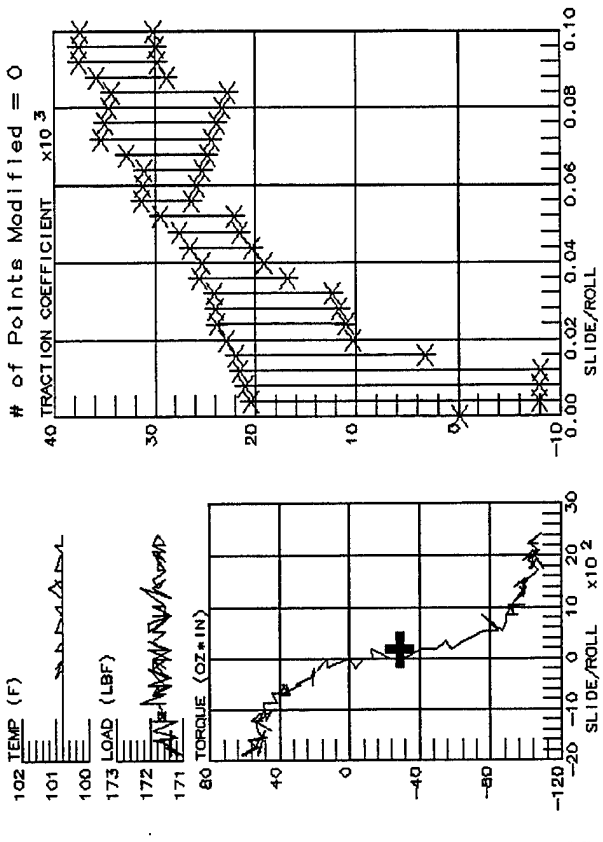
#47



BP 91-119 Pennzane
100F 172LBF 76RPM

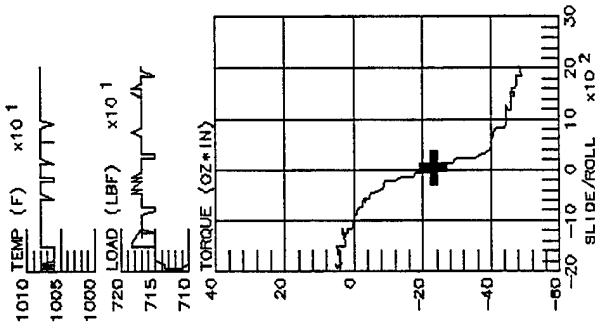
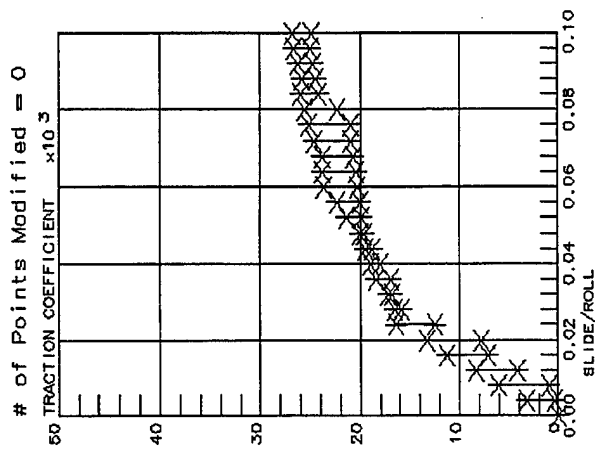
3 FILE: bp100l

#48



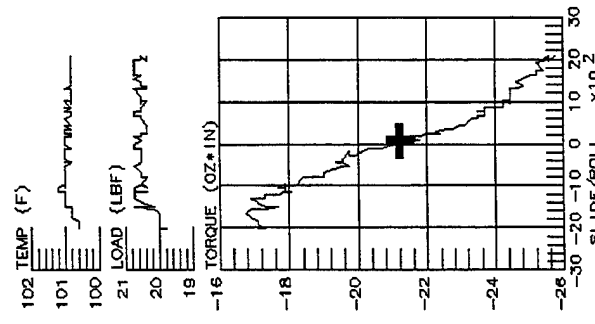
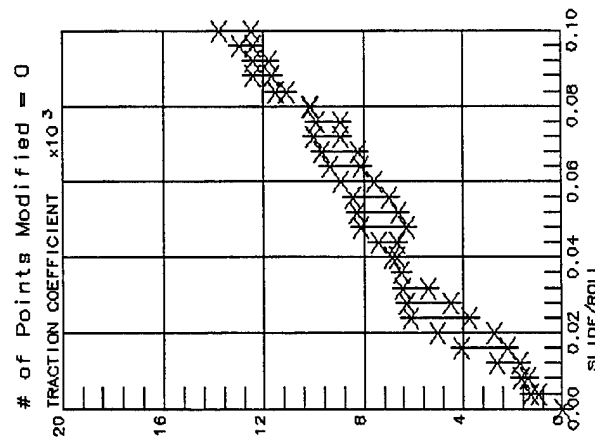
BP 91-119 Pennzane
100F 21LBF 152RPM

4 FILE: bp1001
of Points Modified = 0



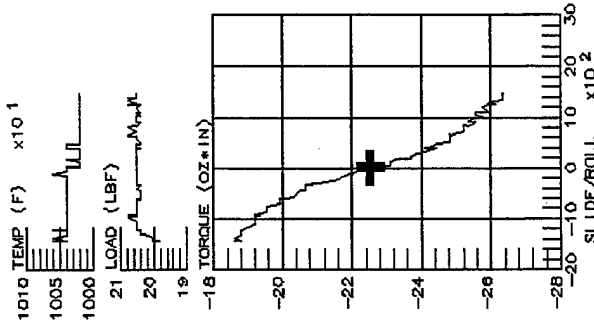
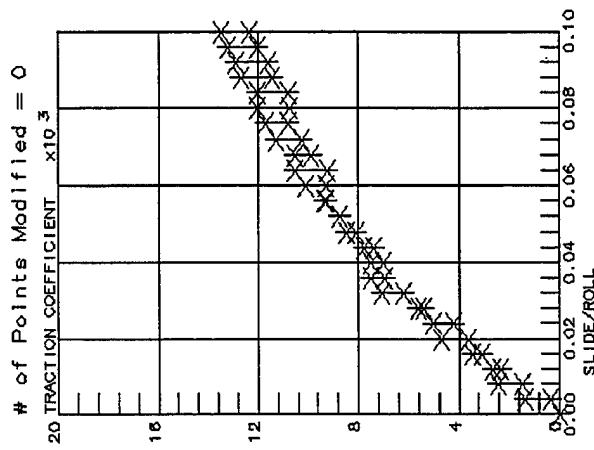
BP 91-119 Pennzane
100F 21LBF 152RPM

5 FILE: bp1001
of Points Modified = 0



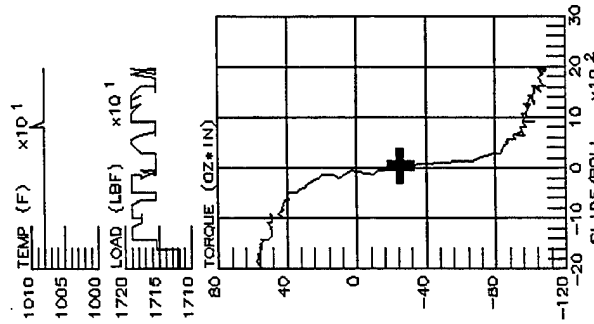
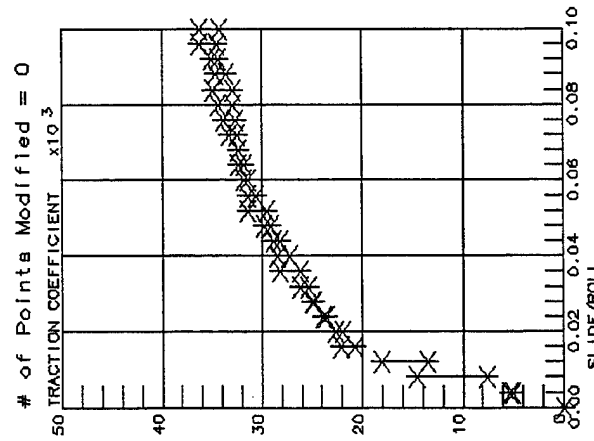
BP 91-119 Pennzane
100F 21LBF 343RPM

6 FILE: bp1001
of Points Modified = 0



BP 91-119 Pennzane
100F 172LBF 152RPM

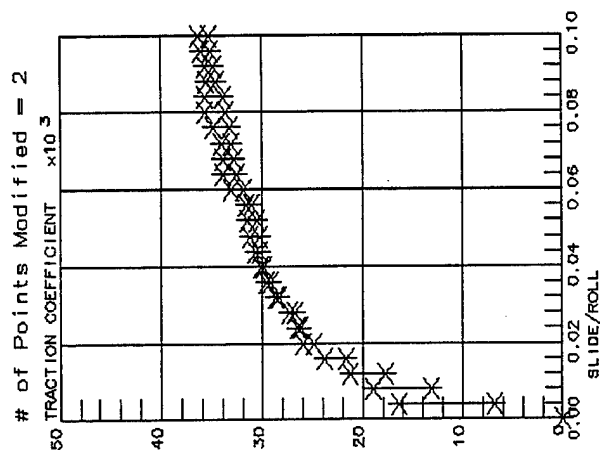
7 FILE: bp1001
of Points Modified = 0



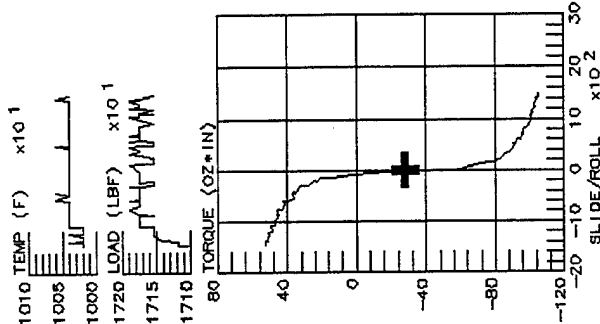
#54

9 FILE: bp1001

of Points Modified = 2



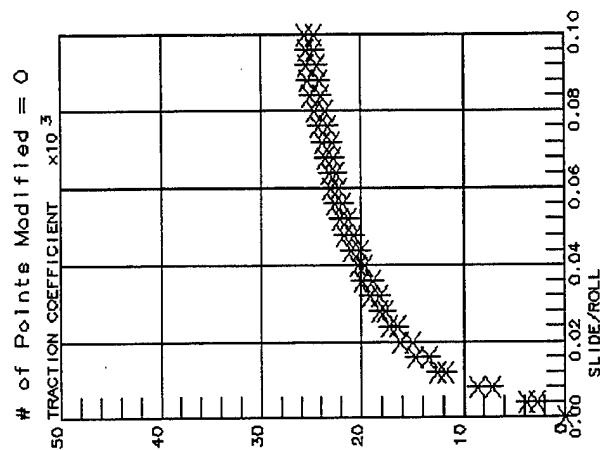
BP 91-119 Pennzane
100F 172LBF 343RPM



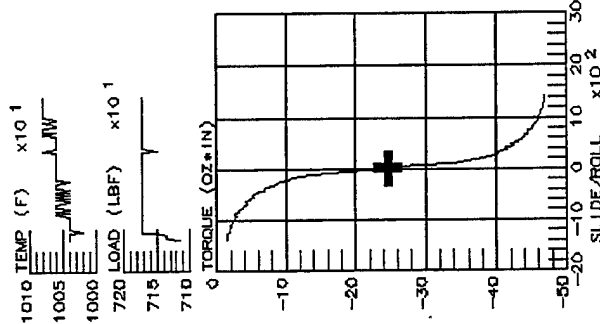
#56

11 FILE: bp1001

of Points Modified = 0



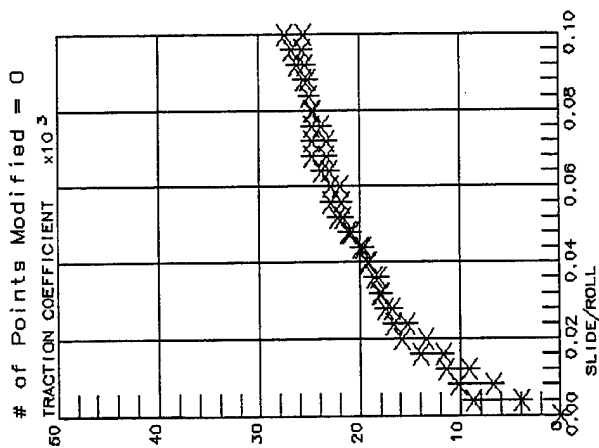
BP 91-119 Pennzane
100F 72LBF 1298RPM



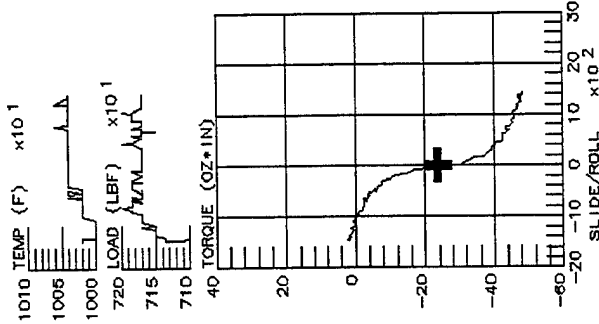
#53

8 FILE: bp1001

of Points Modified = 0



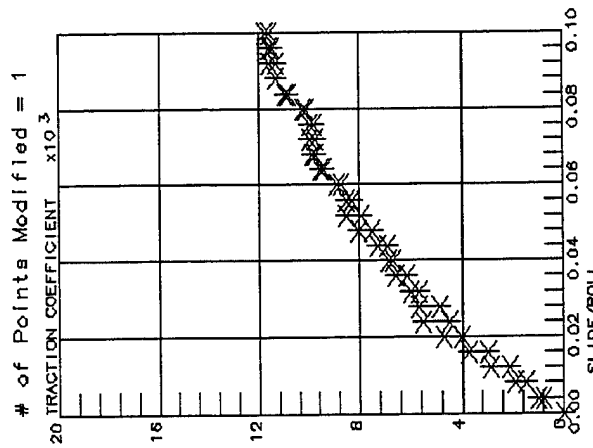
BP 91-119 Pennzane
100F 72LBF 343RPM



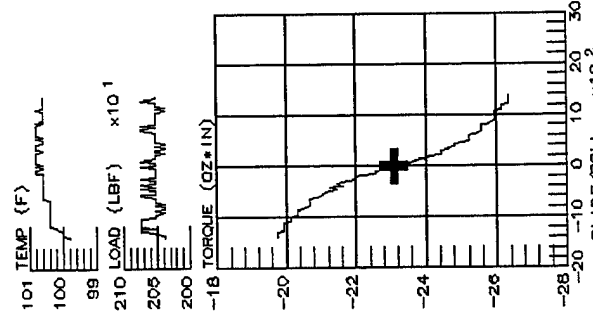
#55

10 FILE: bp1001

of Points Modified = 1



BP 91-119 Pennzane
100F 21LBF 1298RPM

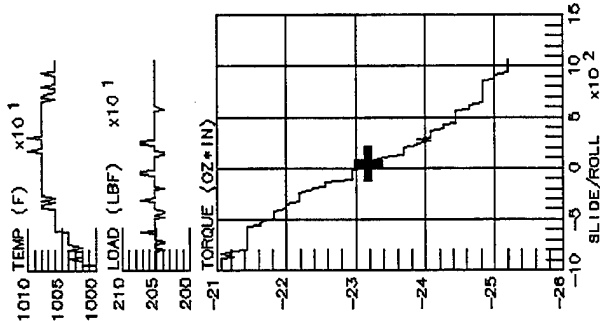
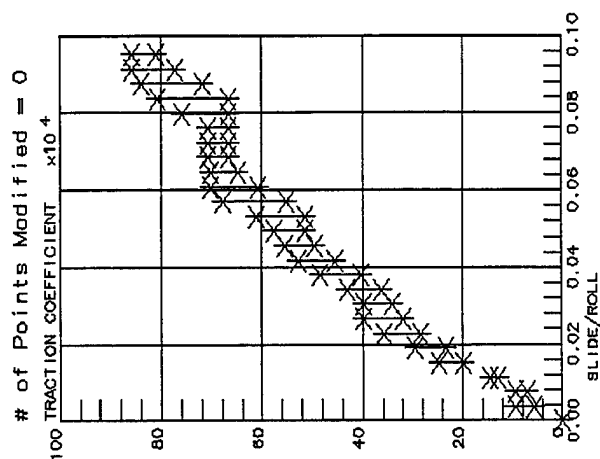


#58

BP 91-119 Pennzane
100F 21LBF 2559RPM

13 FILE: bp1001

of Points Modified = 0

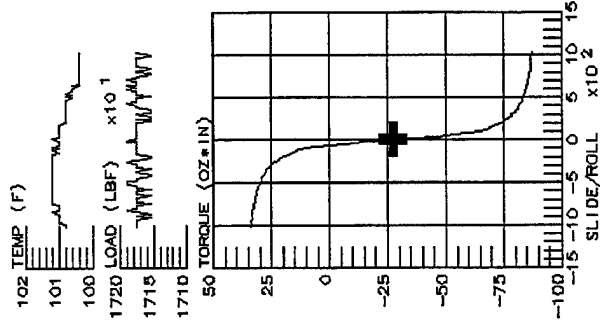
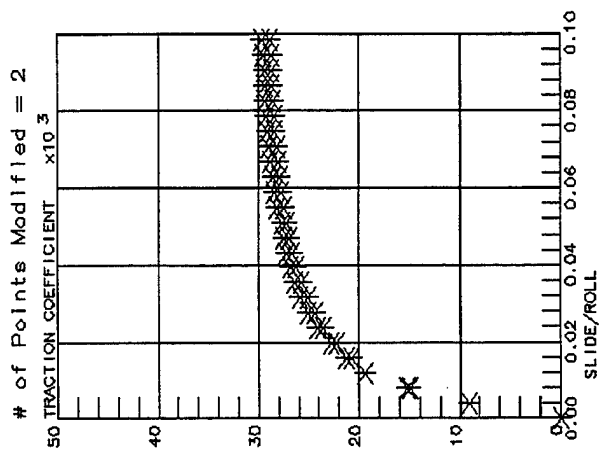


#60

BP 91-119 Pennzane
100F 172LBF 2559RPM

15 FILE: bp1001

of Points Modified = 2

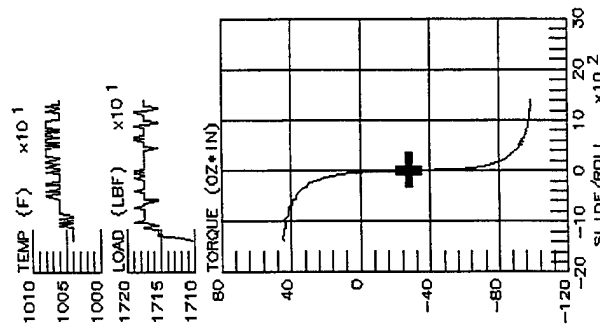
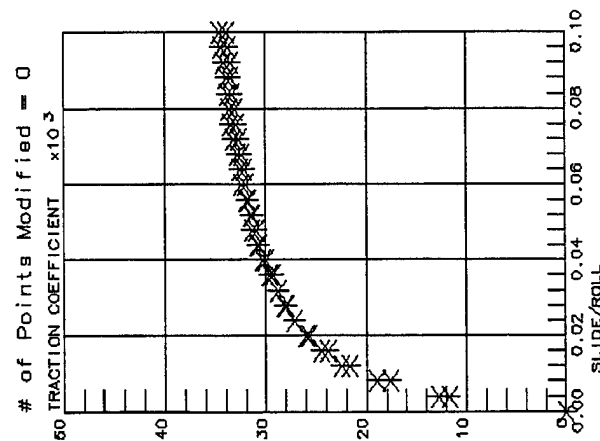


#57

BP 91-119 Pennzane
100F 172LBF 1298RPM

12 FILE: bp1001

of Points Modified = 0

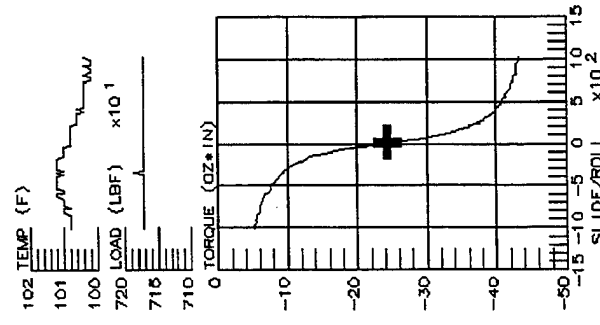
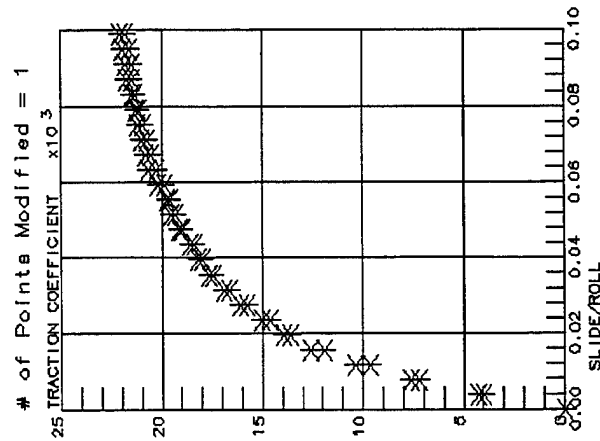


#59

BP 91-119 Pennzane
100F 72LBF 2559RPM

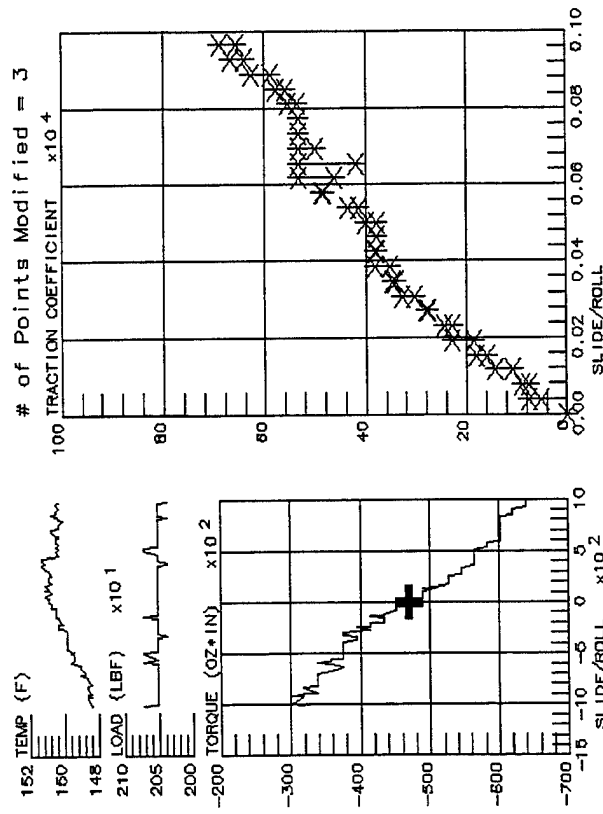
14 FILE: bp1001

of Points Modified = 1



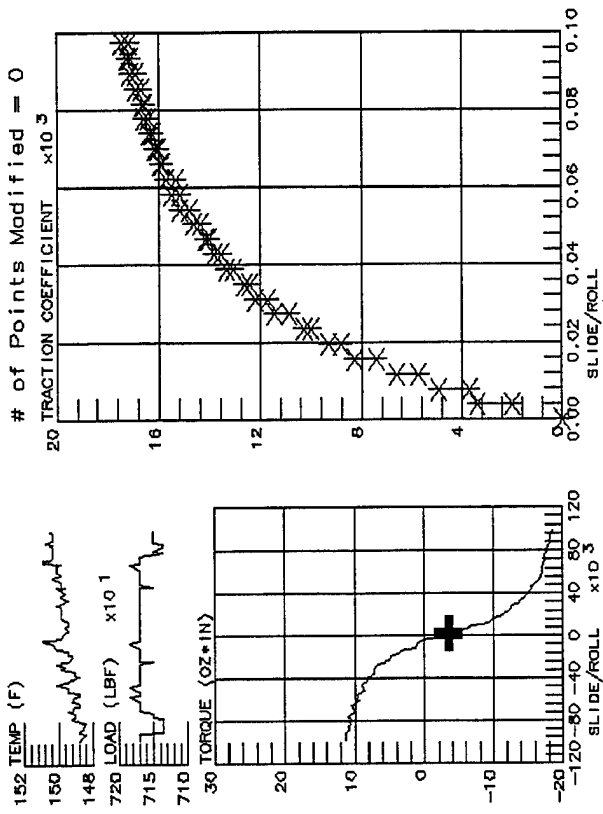
BP 91-119 Pennzane
150F 21LBF 5080RPM

#61
1 FILE: bp150h



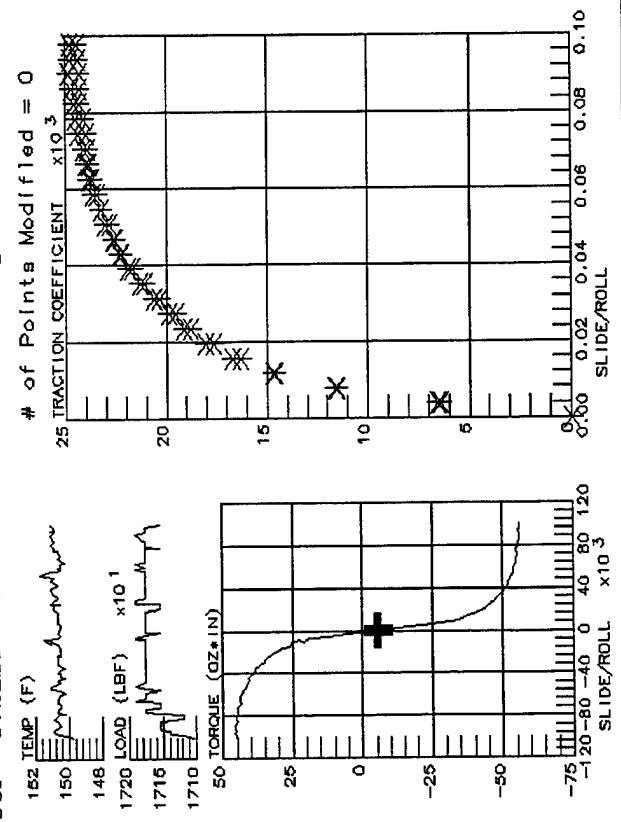
BP 91-119 Pennzane
150F 72LBF 5080RPM

#62
2 FILE: bp150h



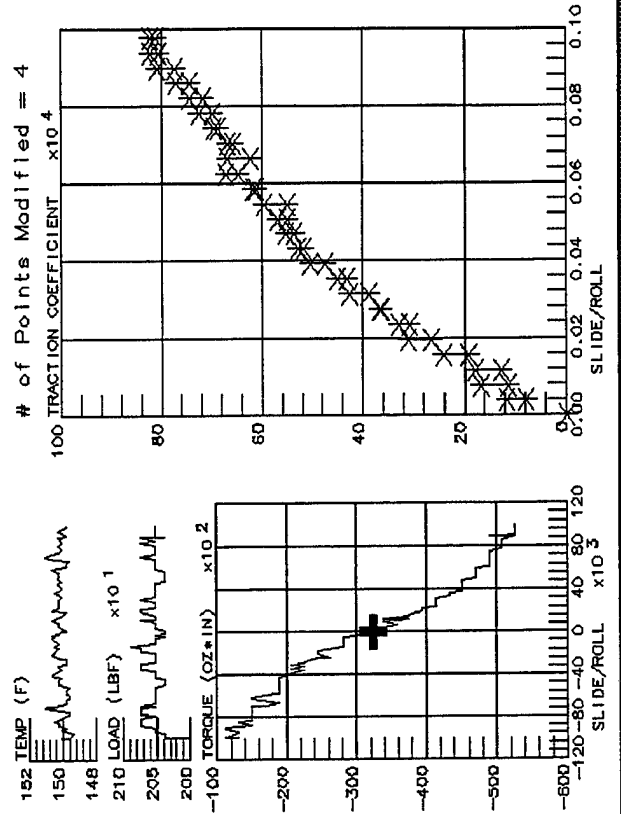
BP 91-119 Pennzane
150F 172LBF 5080RPM

#63
3 FILE: bp150h



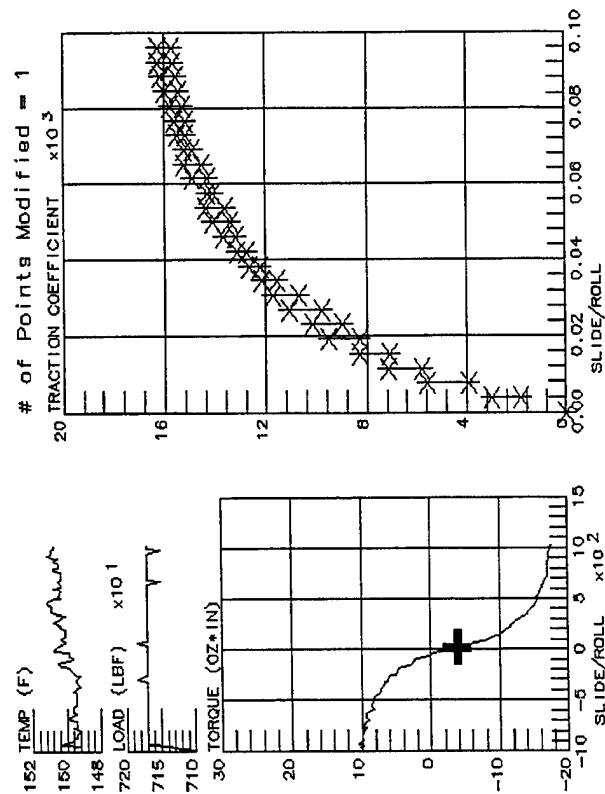
BP 91-119 Pennzane
150F 21LBF 7639RPM

#64
4 FILE: bp150h



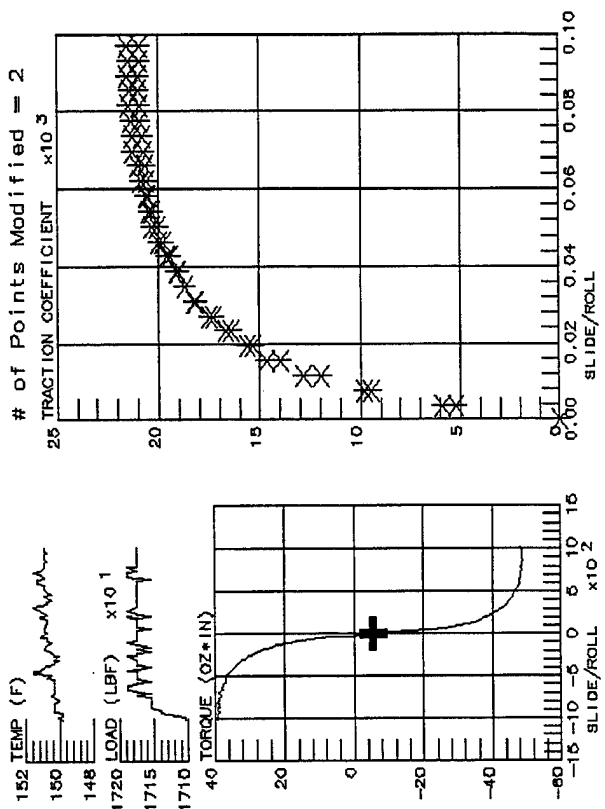
BP 91-119 Pennzane
150F 72LBF 7639RPM

#65
FILE: bp150h
of Points Modified = 1



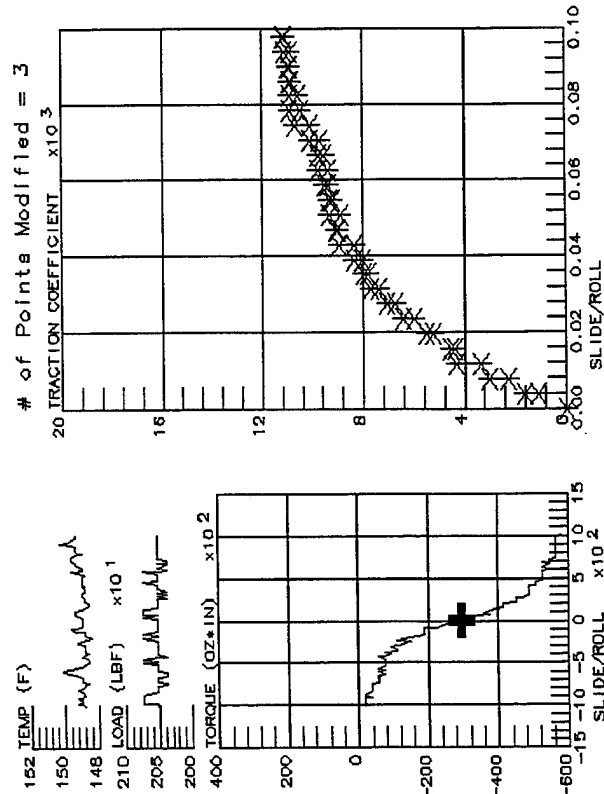
BP 91-119 Pennzane
150F 172LBF 7639RPM

#66
FILE: bp150h
of Points Modified = 2



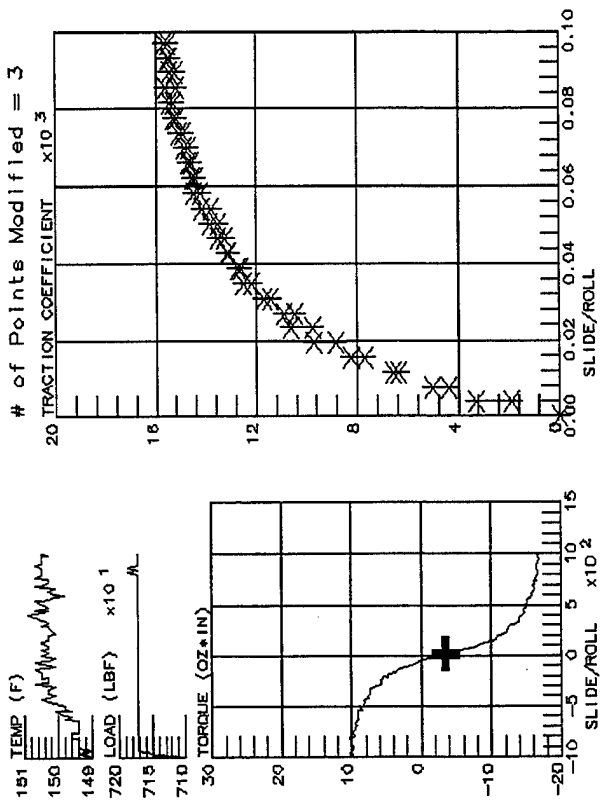
BP 91-119 Pennzane
150F 21LBF 1019RPM

#67
FILE: bp150h
of Points Modified = 3



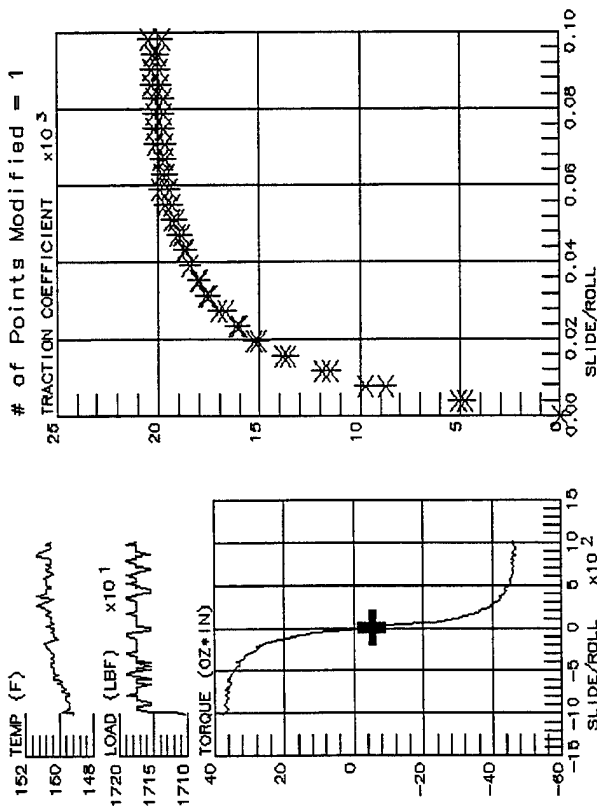
BP 91-119 Pennzane
150F 72LBF 1019RPM

#68
FILE: bp150h
of Points Modified = 3



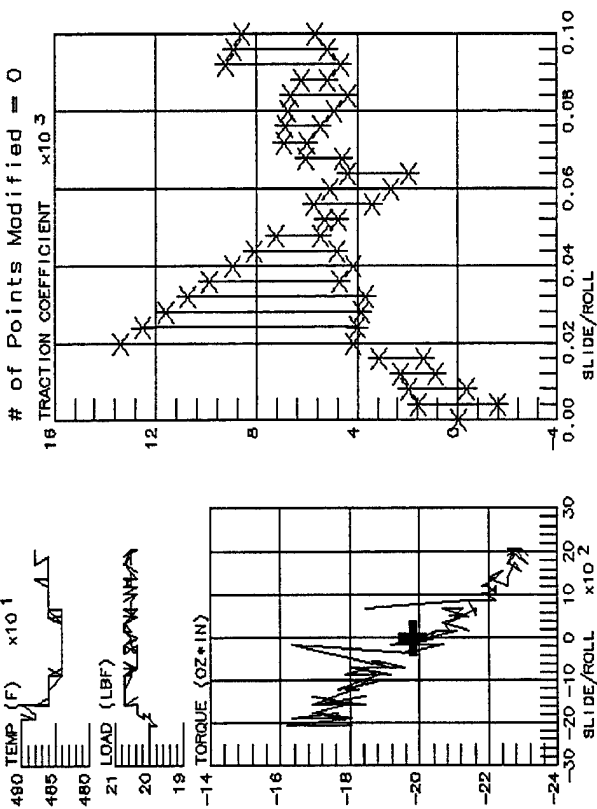
BP 91-119 Pennzane
150F 172LBF 1019RPM

#69
FILE: bp150h
of Points Modified = 1



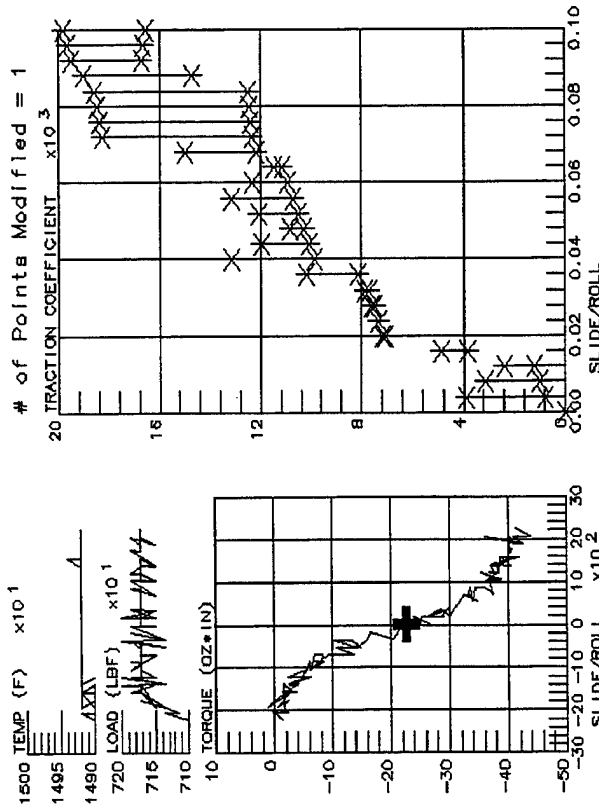
BP 91-119 Pennzane
150F 21LBF 76RPM

#70
FILE: bp150l
of Points Modified = 0



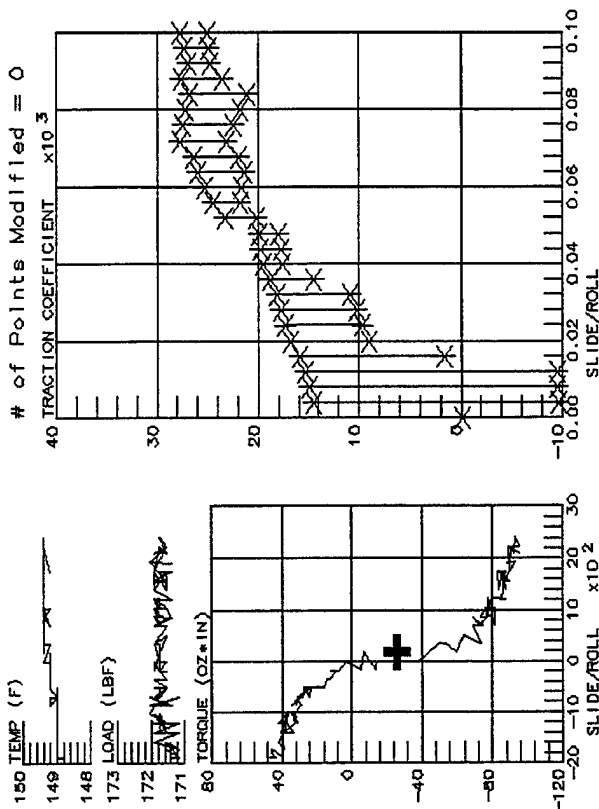
BP 91-119 Pennzane
150F 72LBF 76RPM

#71
FILE: bp150i
of Points Modified = 1



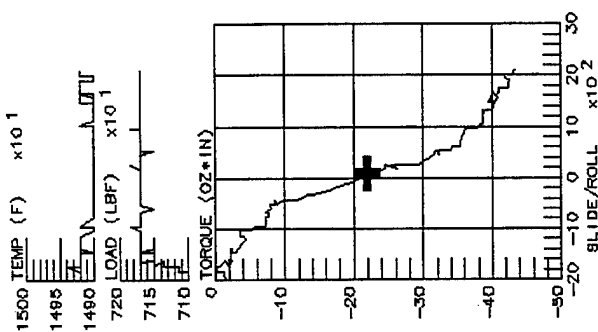
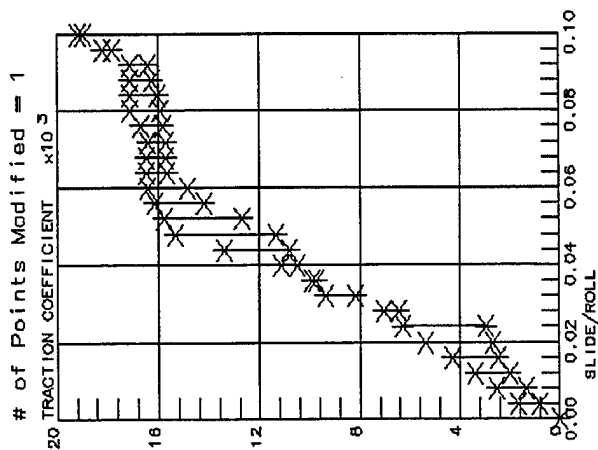
BP 91-119 Pennzane
150F 172LBF 76RPM

#72
FILE: bp150j
of Points Modified = 0



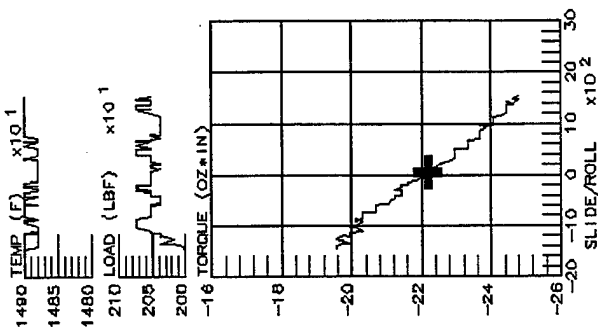
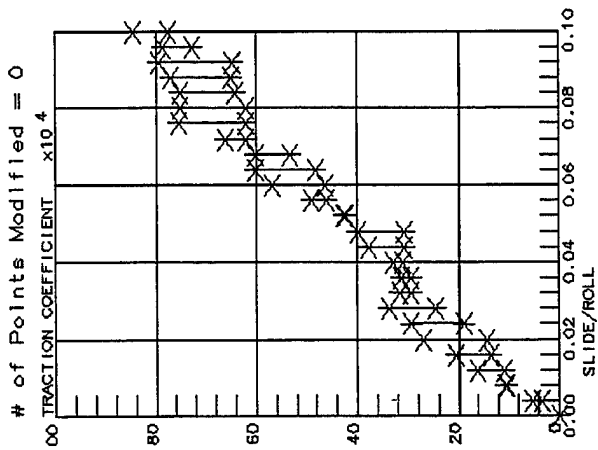
#74

BP 91-119 Pennzane
150F 72LBF 162RPM
5 FILE: bp1501
of Points Modified = 1



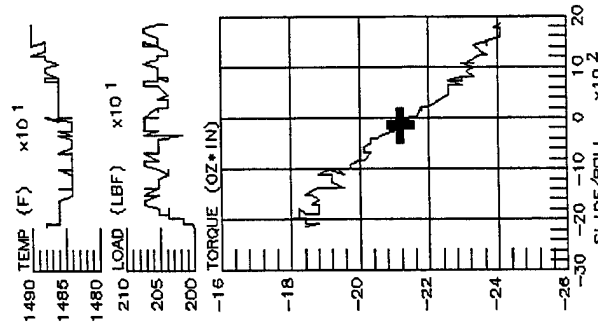
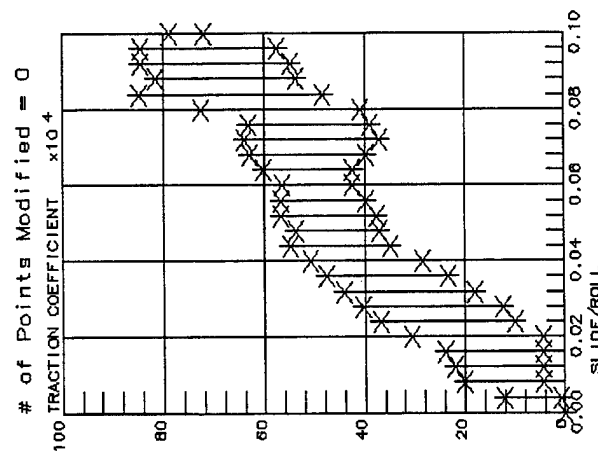
#76

BP 91-119 Pennzane
150F 21LBF 343RPM
7 FILE: bp1501
of Points Modified = 0



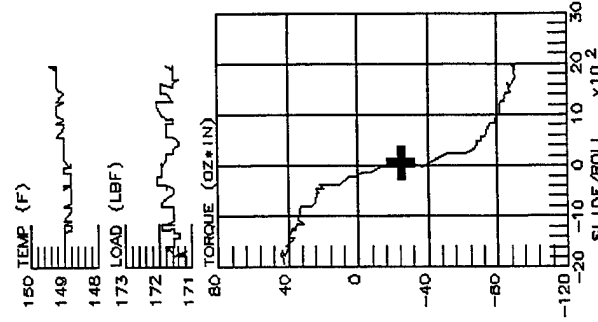
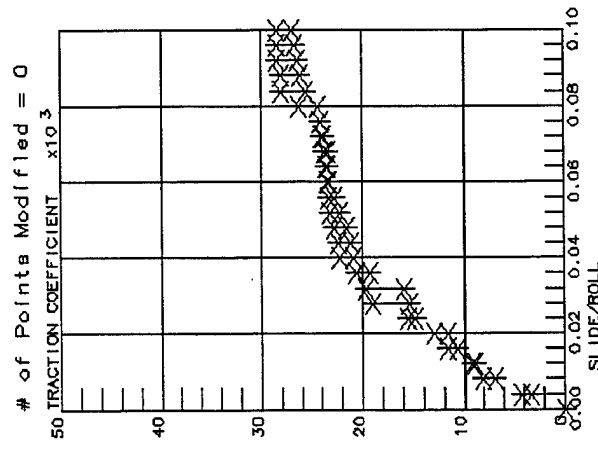
#73

BP 91-119 Pennzane
150F 21LBF 152RPM
4 FILE: bp1501
of Points Modified = 0



#75

BP 91-119 Pennzane
150F 172LBF 152RPM
6 FILE: bp1501
of Points Modified = 0

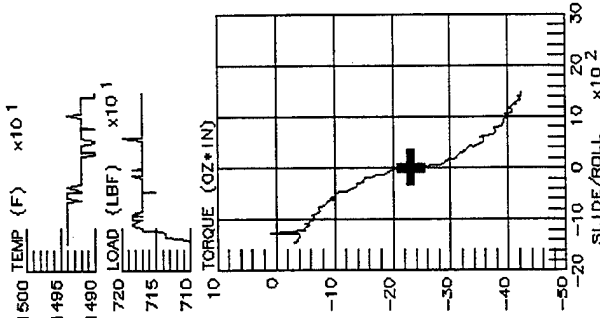
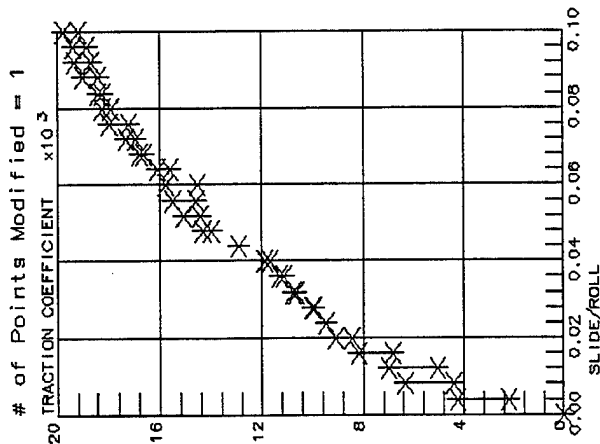


BP 91-119 Pennzane
150F 72LBF 343RPM

8 FILE: bp1501

#77

of Points Modified = 1

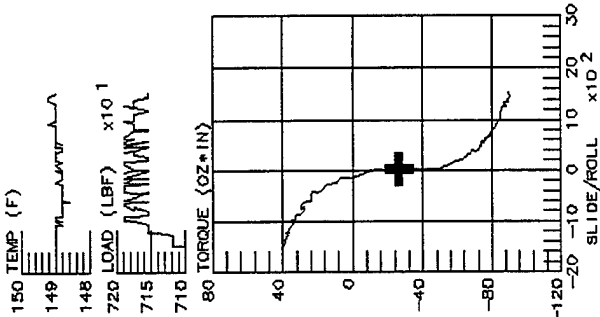
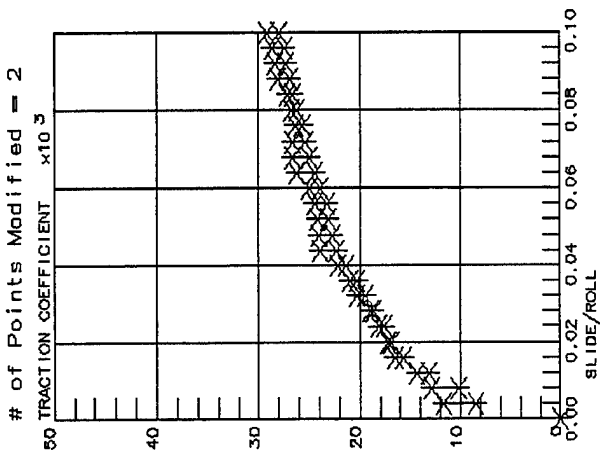


BP 91-119 Pennzane
150F 172LBF 343RPM

9 FILE: bp1501

#78

of Points Modified = 2

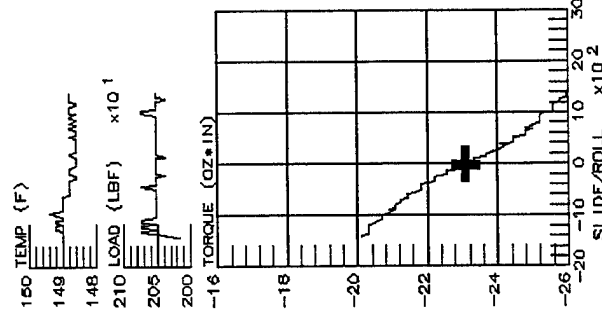
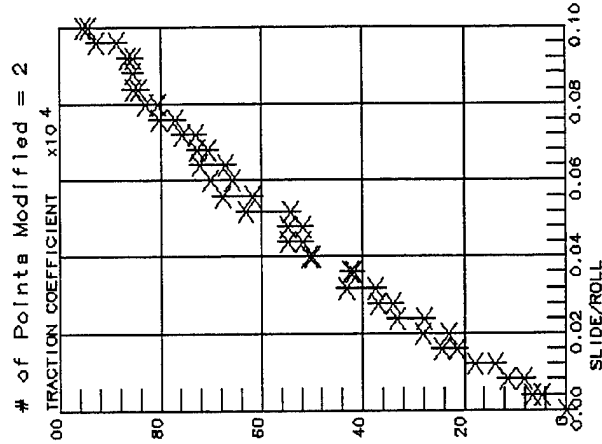


BP 91-119 Pennzane
150F 21LBF 1298RPM

10 FILE: bp1501

#79

of Points Modified = 2

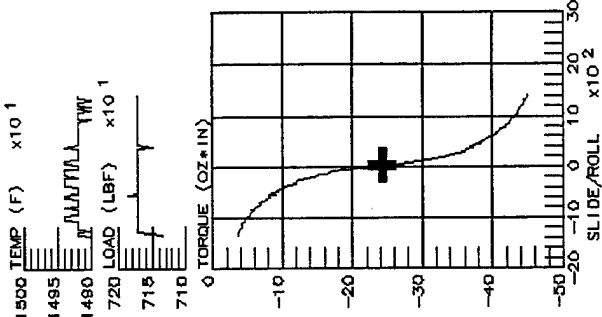
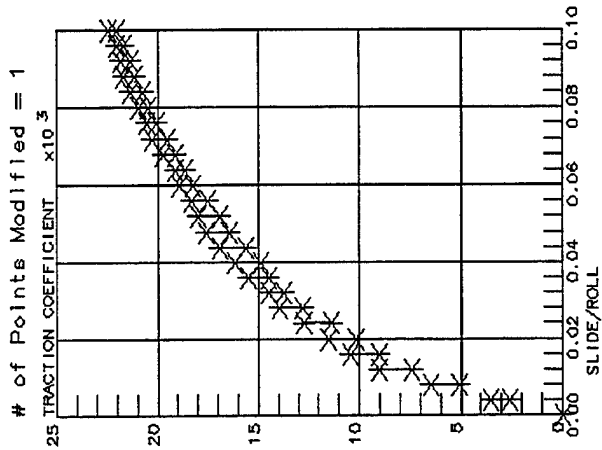


BP 91-119 Pennzane
150F 72LBF 1298RPM

11 FILE: bp1501

#80

of Points Modified = 1

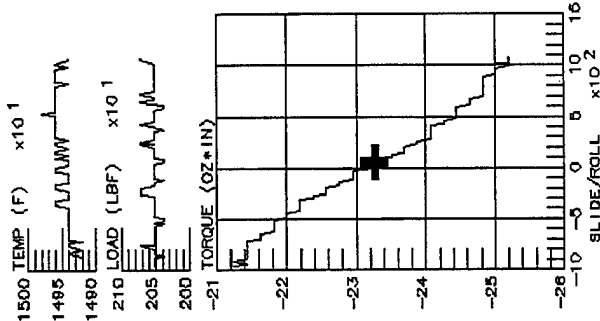
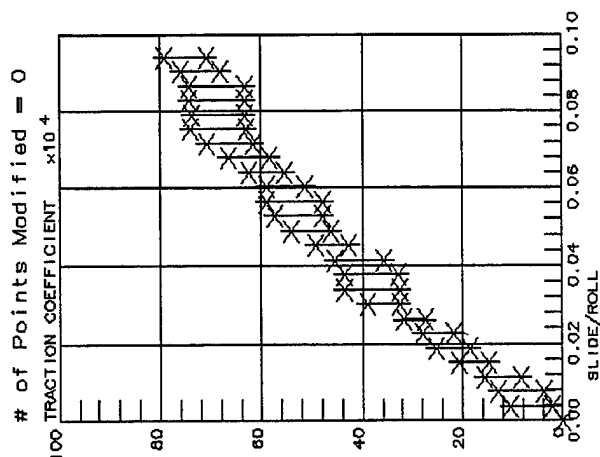


#82

BP 91-119 Pennzane
150F 21LBF 2559RPM

13 FILE: bp1501

of Points Modified = 0

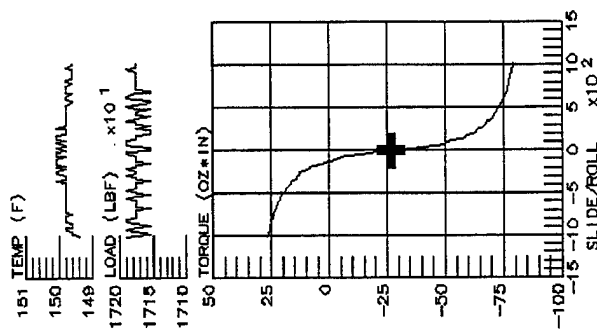
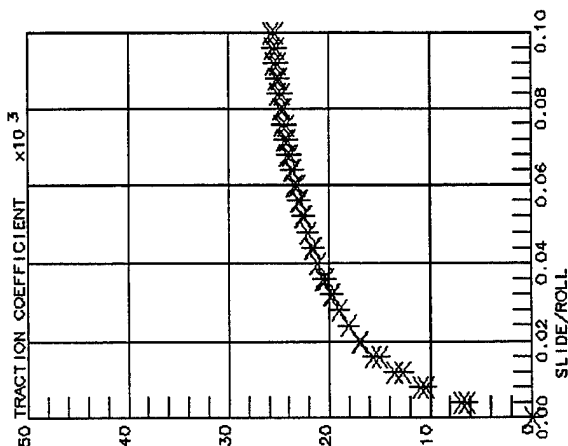


#84

BP 91-119 Pennzane
150F 172LBF 2559RPM

15 FILE: bp1501

of Points Modified = 3

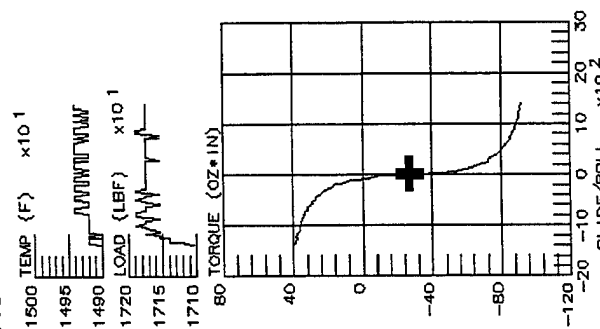
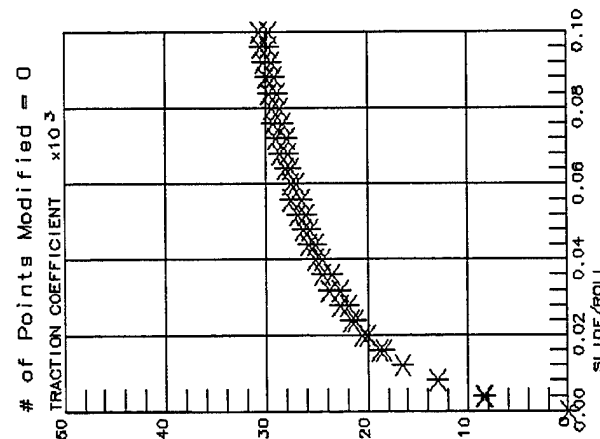


#81

BP 91-119 Pennzane
150F 172LBF 1298RPM

12 FILE: bp1501

of Points Modified = 0

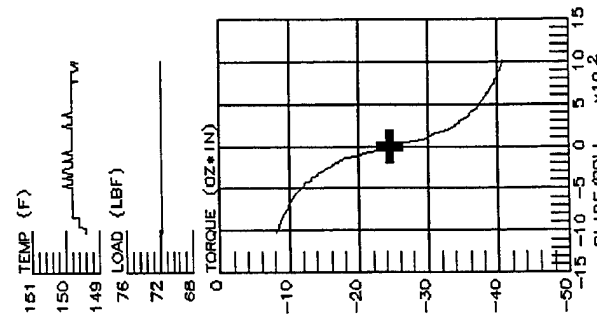
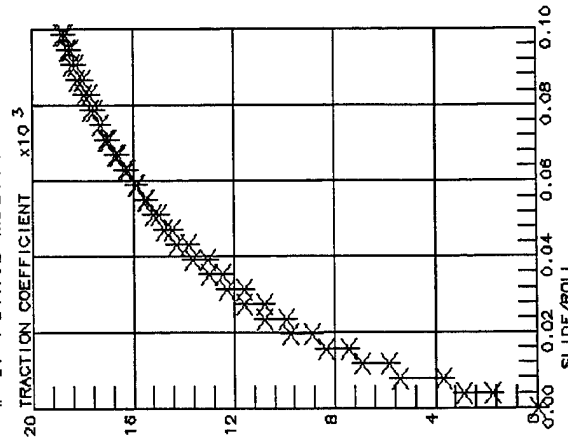


#83

BP 91-119 Pennzane
150F 72LBF 2559RPM

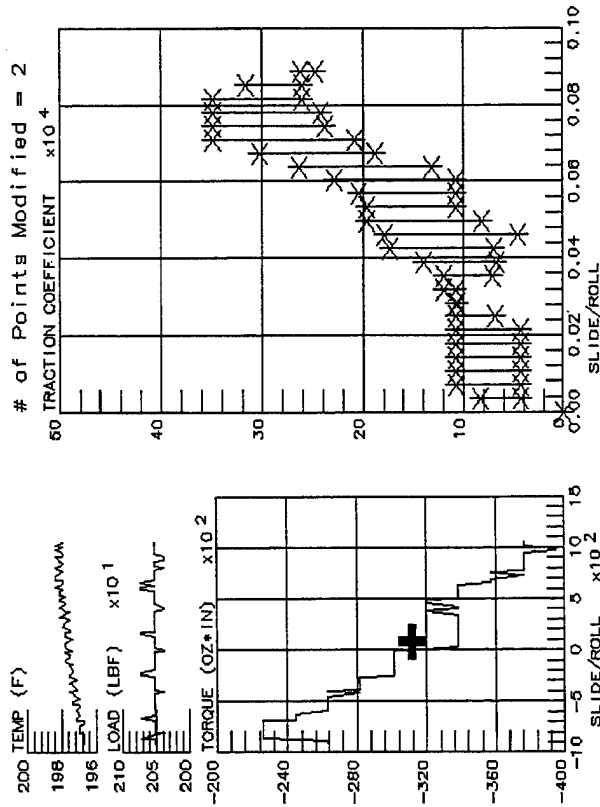
14 FILE: bp1501

of Points Modified = 1



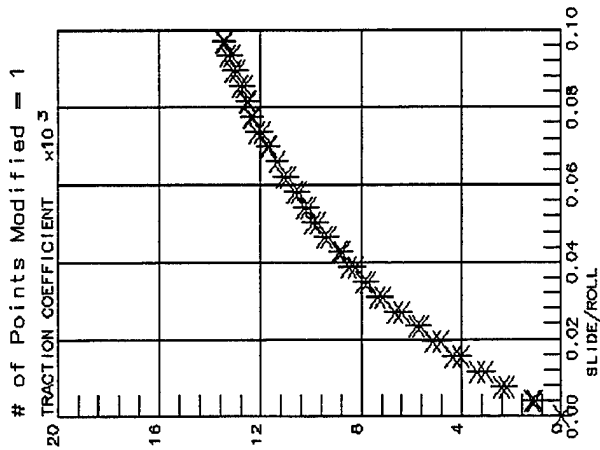
BP 91-119 Pennzane
200F 21LBF 5080RPM

#85
1 FILE: bp200h



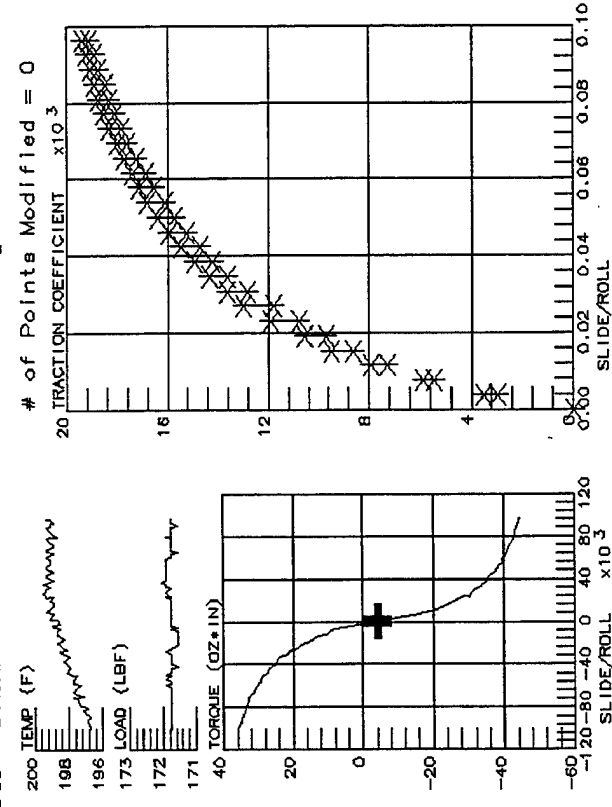
BP 91-119 Pennzane
200F 72LBF 5080RPM

#86
2 FILE: bp200h



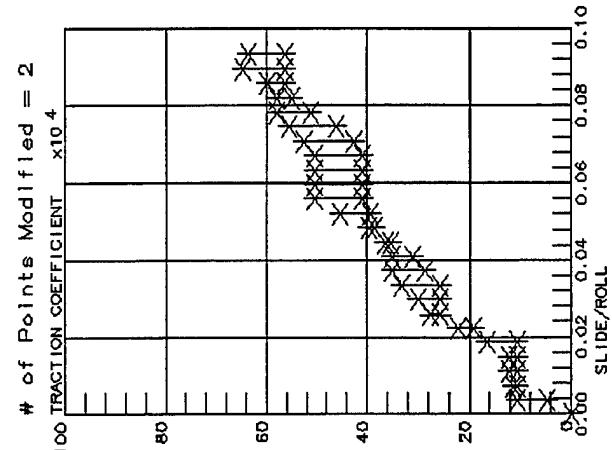
BP 91-119 Pennzane
200F 172LBF 5080RPM

#87
3 FILE: bp200h



BP 91-119 Pennzane
200F 21LBF 7639RPM

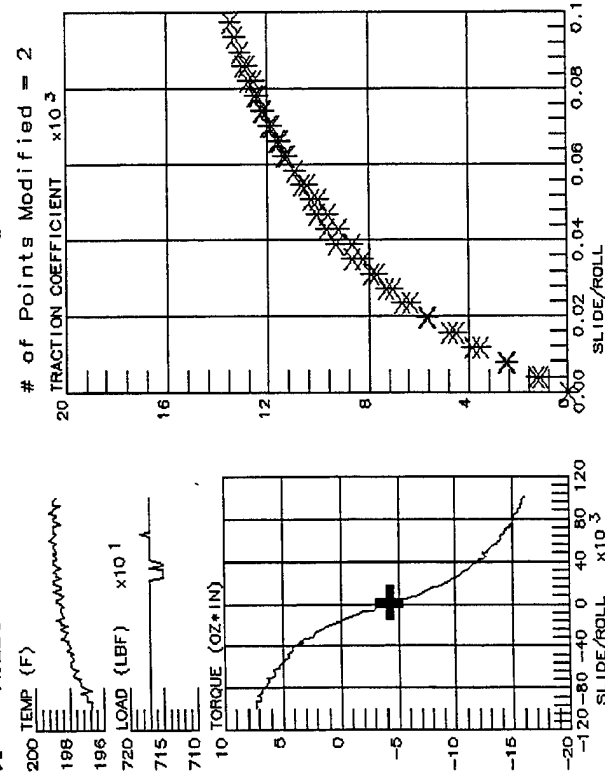
#88
4 FILE: bp200h



BP 91-119 Pennzane
200F 72LBF 7639RPM

5 FILE: bp200h

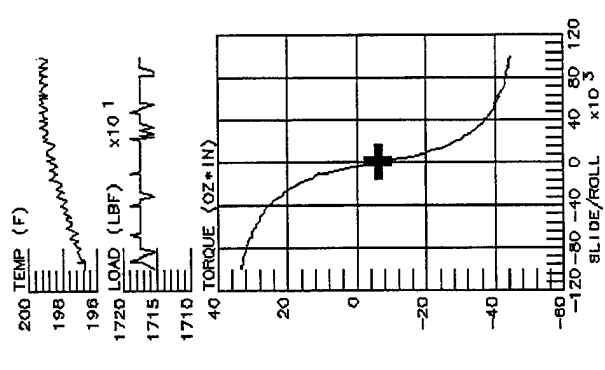
of Points Modified = 2



BP 91-119 Pennzane
200F 172LBF 7639RPM

6 FILE: bp200h

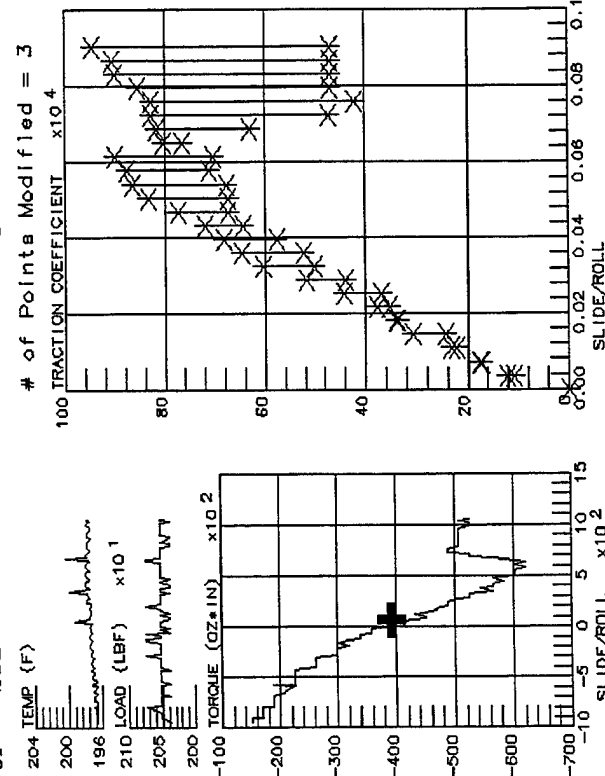
of Points Modified = 2



BP 91-119 Pennzane
200F 211LBF 10198RPM

7 FILE: bp200h

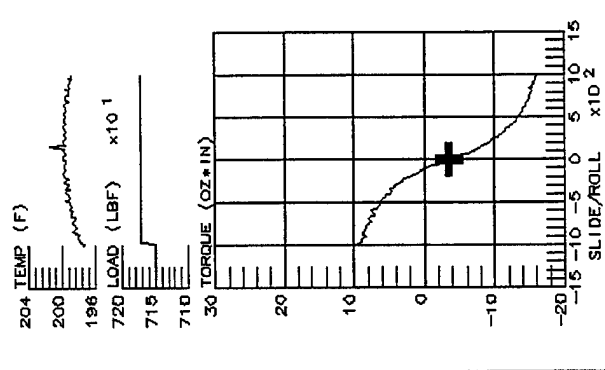
of Points Modified = 3



BP 91-119 Pennzane
200F 72LBF 10198RPM

8 FILE: bp200h

of Points Modified = 2

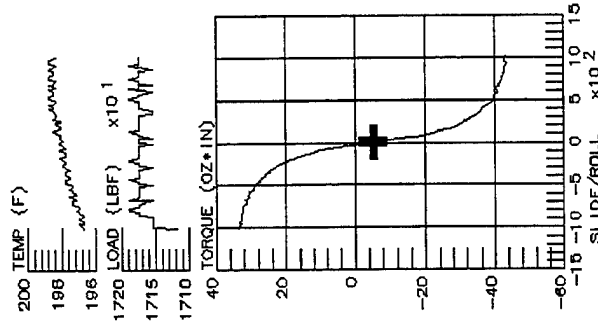
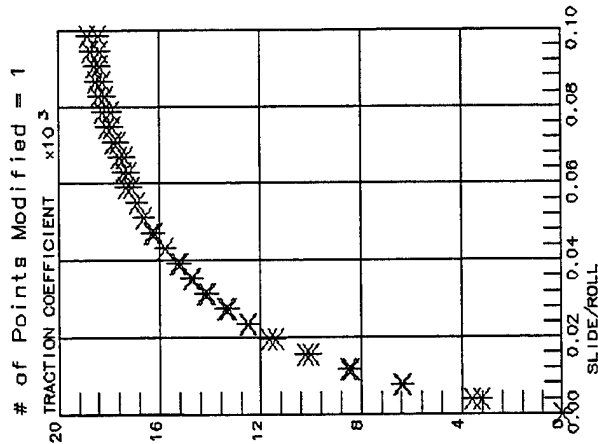


BP 91-119 Pennzane
200F 172LBF 1019RPM

9 FILE: bp200h

#93

of Points Modified = 1

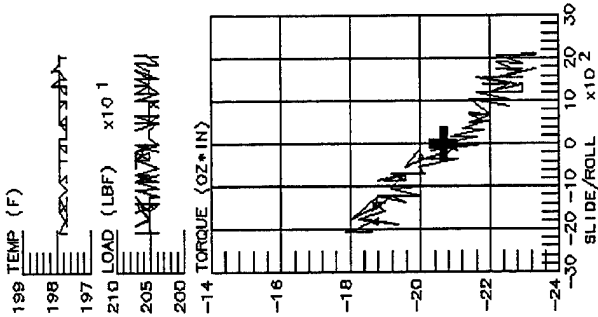
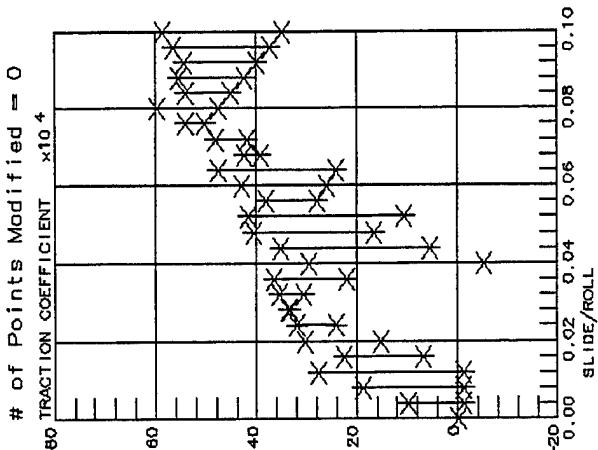


BP 91-119 Pennzane
200F 21LBF 76RPM

1 FILE: bp200l

#94

of Points Modified = 0

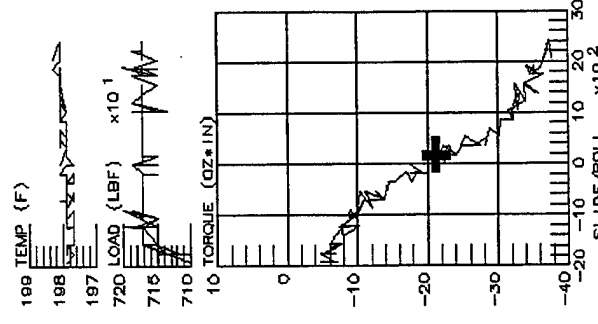
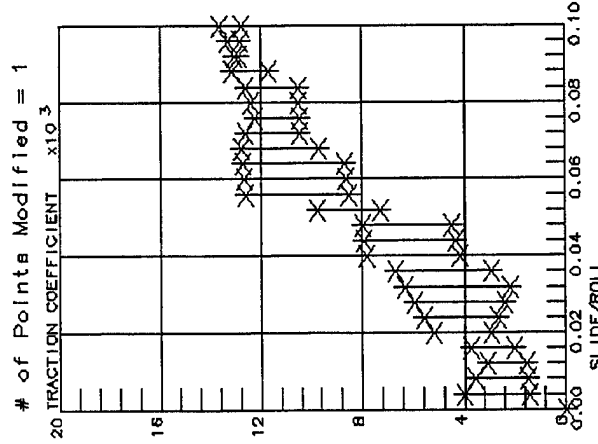


BP 91-119 Pennzane
200F 72LBF 76RPM

2 FILE: bp200l

#95

of Points Modified = 1

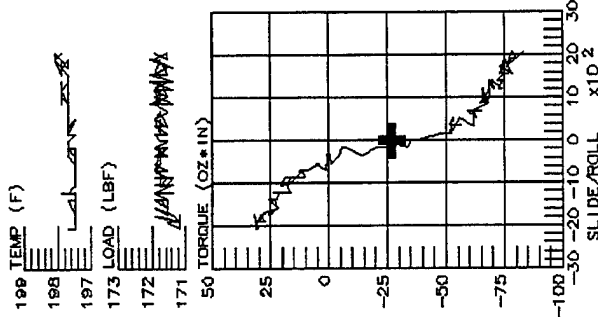
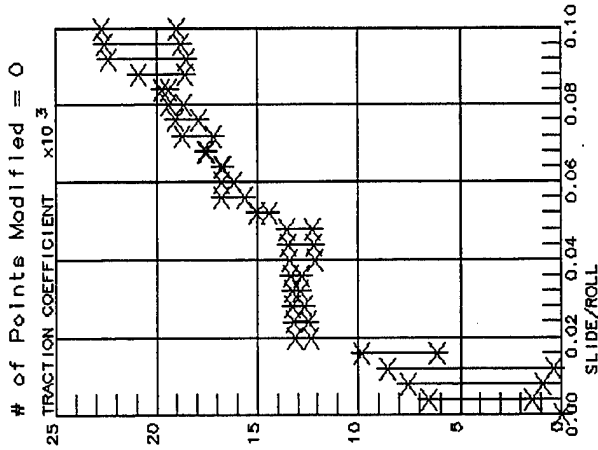


BP 91-119 Pennzane
200F 172LBF 76RPM

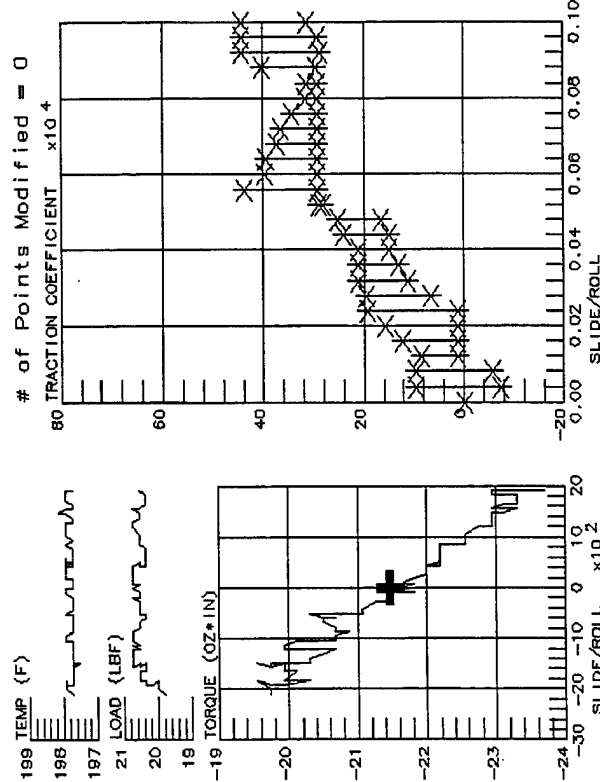
3 FILE: bp200l

#96

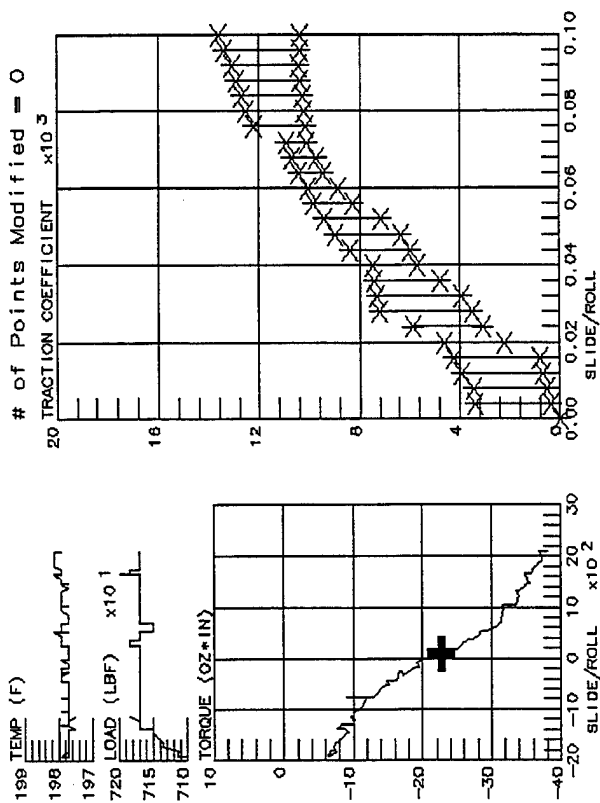
of Points Modified = 0



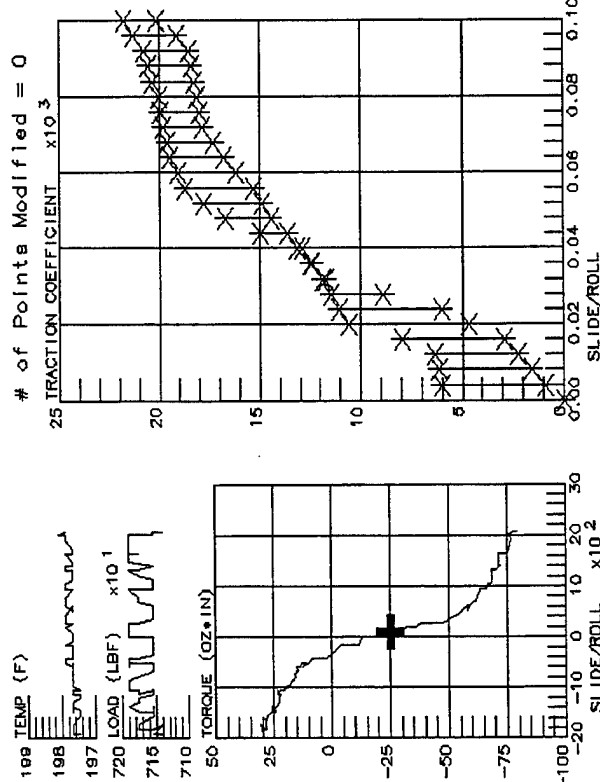
BP 91-119 Pennzane 200F 21LBF 152RPM 4 FILE: bp2001 #97



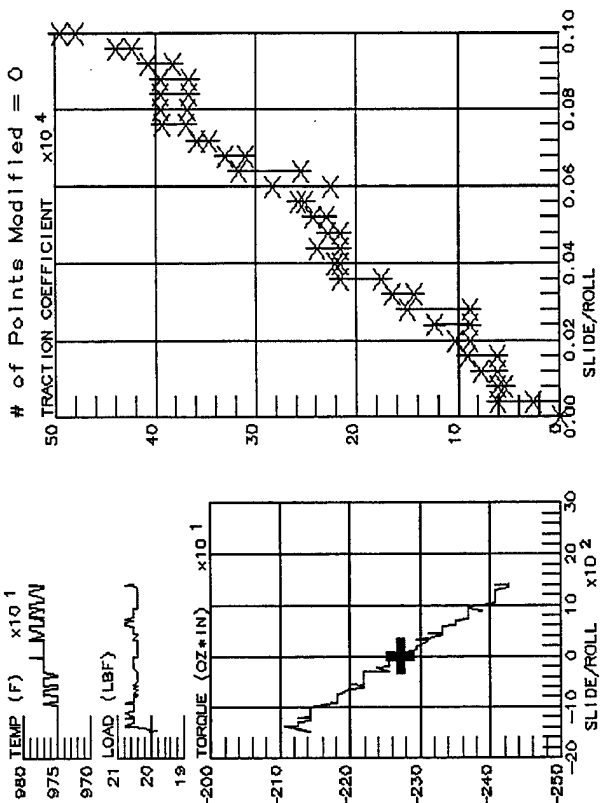
BP 91-119 Pennzane 200F 72LBF 152RPM 5 FILE: bp2001 #98



BP 91-119 Pennzane 200F 172LBF 152RPM 6 FILE: bp2001 #99



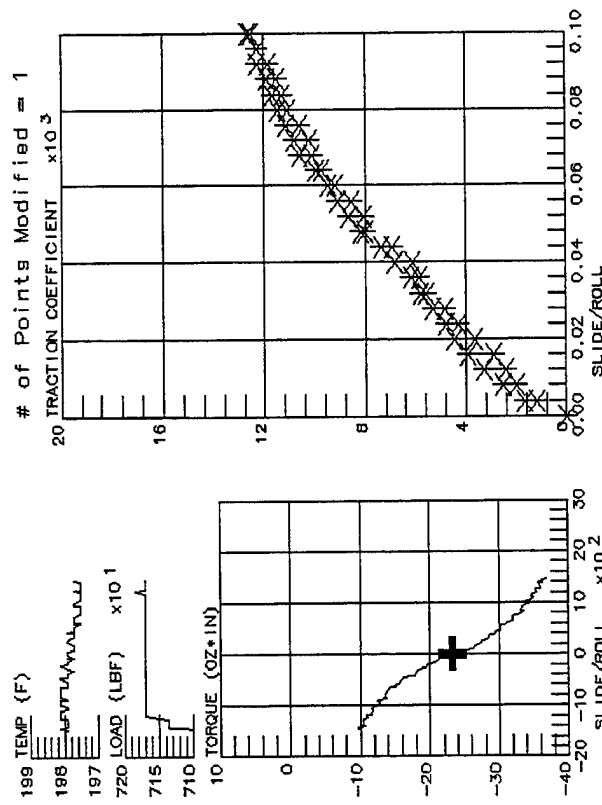
BP 91-119 Pennzane 200F 21LBF 343RPM 7 FILE: bp2001 #100



BP 91-119 Pennzane
200F 72LBF 343RPM

8 FILE: bp2001

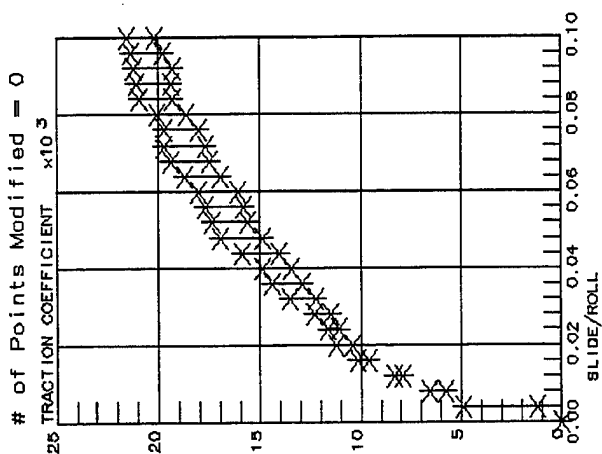
#101



BP 91-119 Pennzane
200F 172LBF 343RPM

9 FILE: bp2001

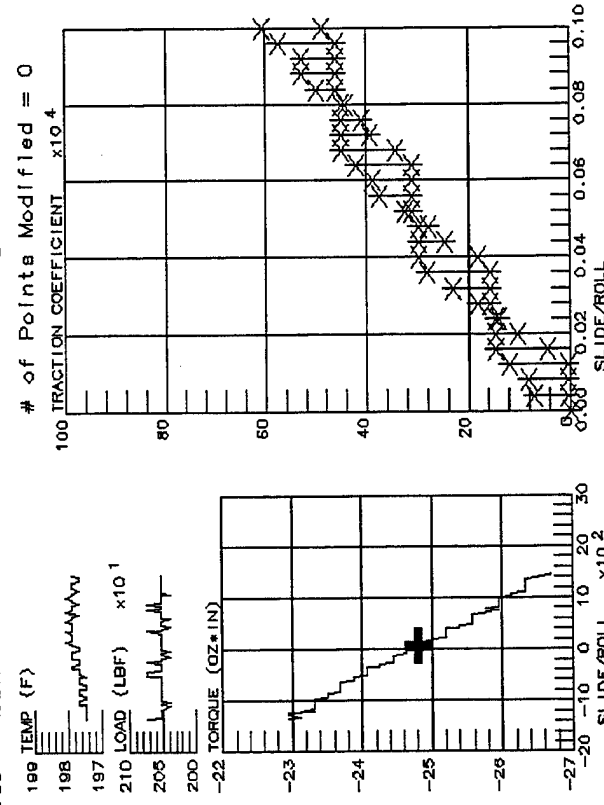
#102



BP 91-119 Pennzane
200F 21LBF 1298RPM

10 FILE: bp2001

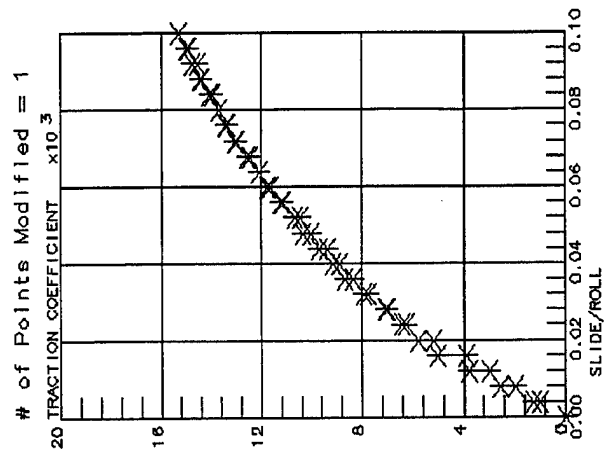
#103



BP 91-119 Pennzane
200F 72LBF 1298RPM

11 FILE: bp2001

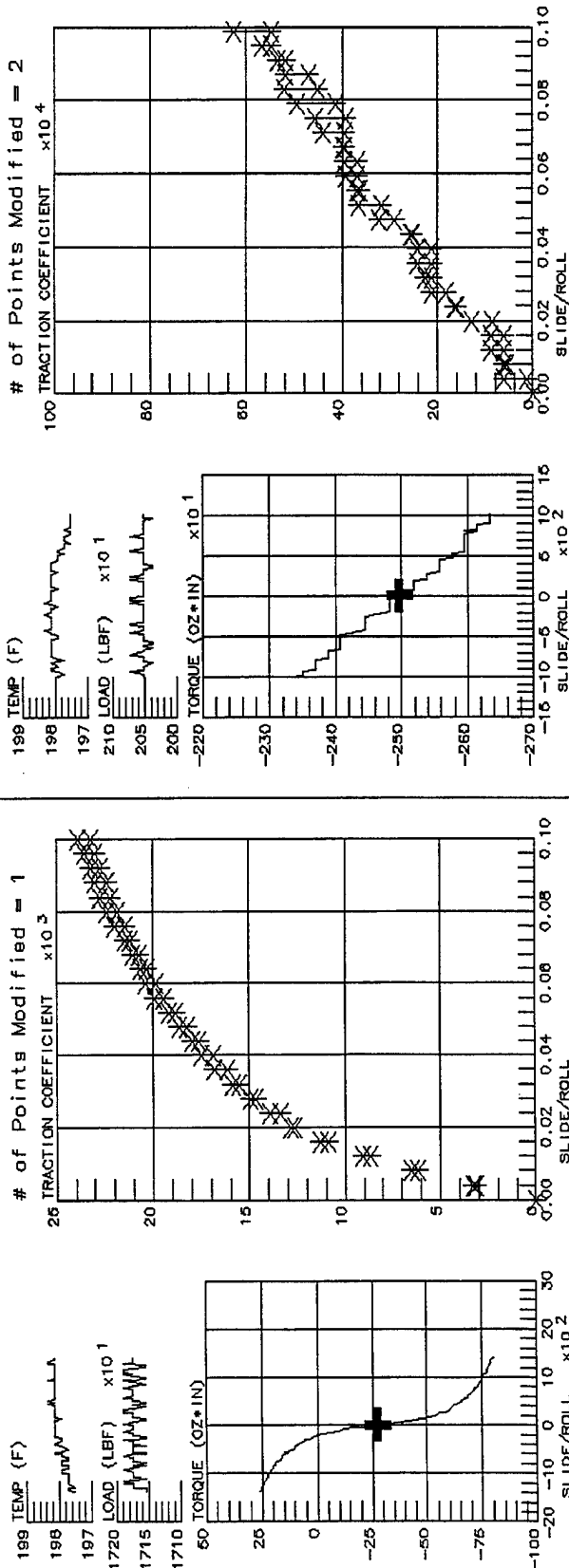
#104



BP 91-119 Pennzane 200F 172LBF 1298RPM 12 FILE: bp2001 #106

of Points Modified = 1

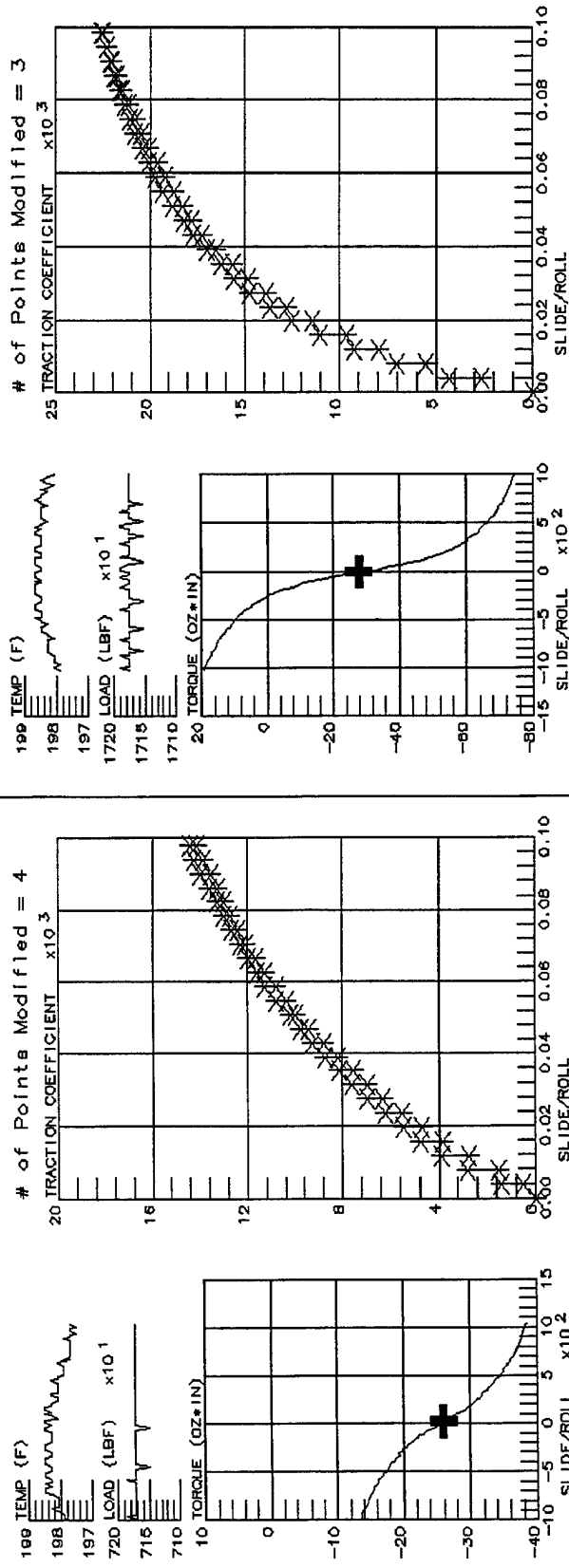
of Points Modified = 2



BP 91-119 Pennzane 200F 172LBF 2559RPM 15 FILE: bp2001 #108

of Points Modified = 4

of Points Modified = 3

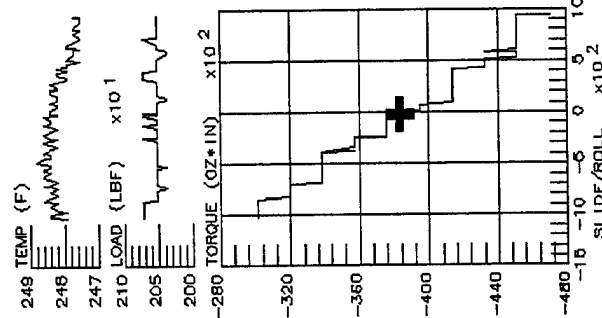
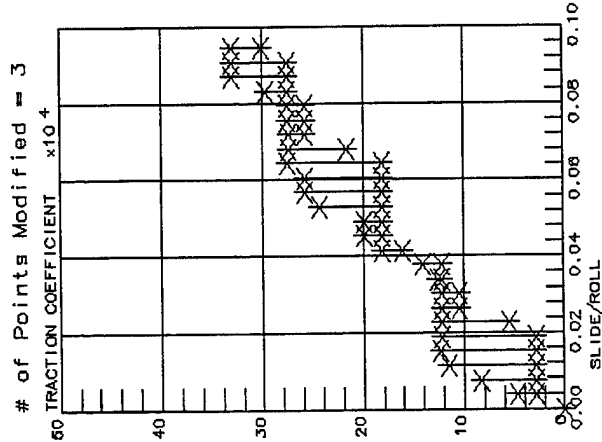


BP 91-119 Pennzane
250F 21LBF 5080RPM

1 FILE: bp250h

#109

of Points Modified = 3



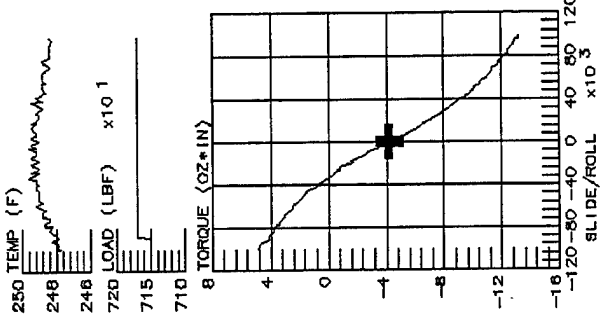
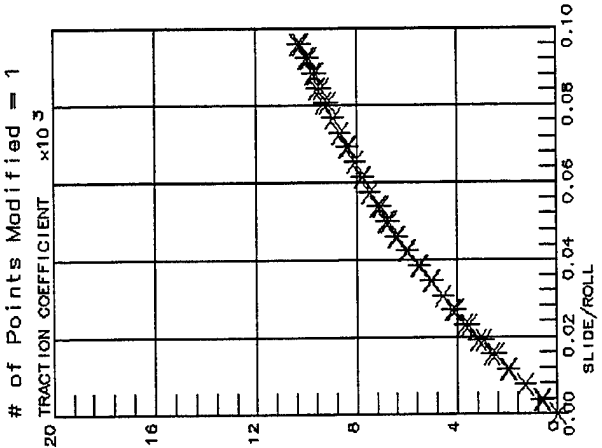
BP 91-119 Pennzane
250F 72LBF 5080RPM

2

FILE: bp250h

#110

of Points Modified = 1

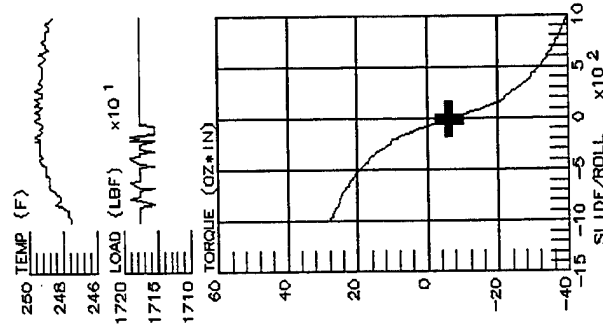
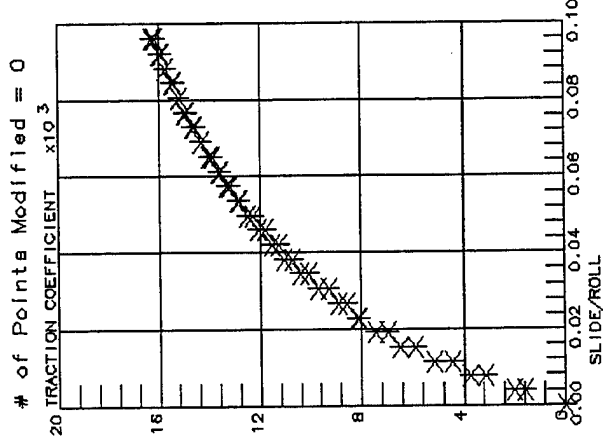


BP 91-119 Pennzane
250F 172LBF 5080RPM

3 FILE: bp250h

#111

of Points Modified = 0



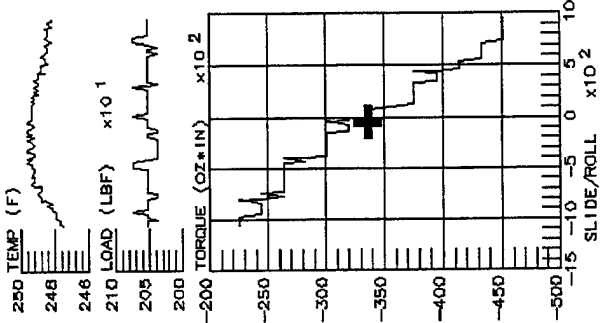
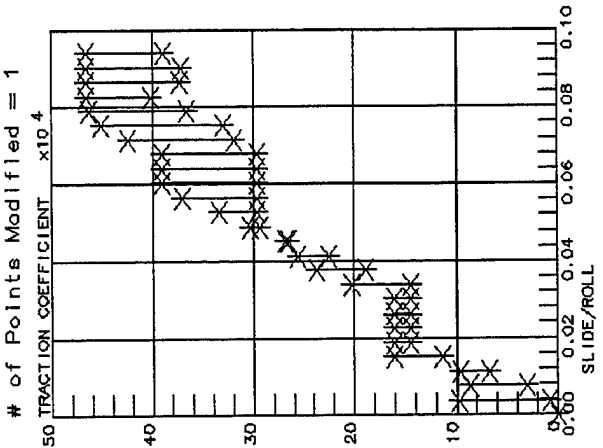
BP 91-119 Pennzane
250F 21LBF 7639RPM

4

FILE: bp250h

#112

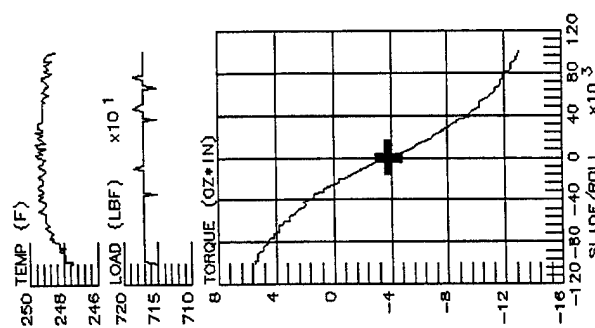
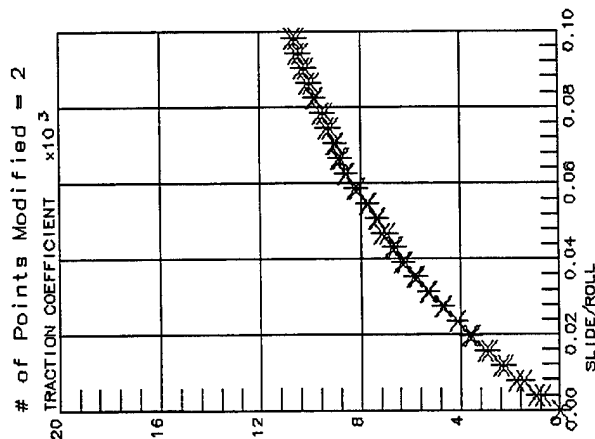
of Points Modified = 1



BP 91-119 Pennzane
250F 72LBF 7639RPM

#113 FILE: bp250h

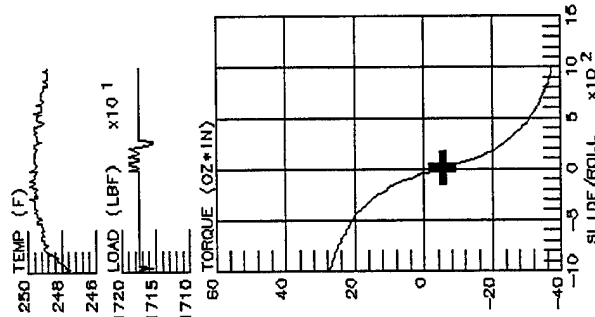
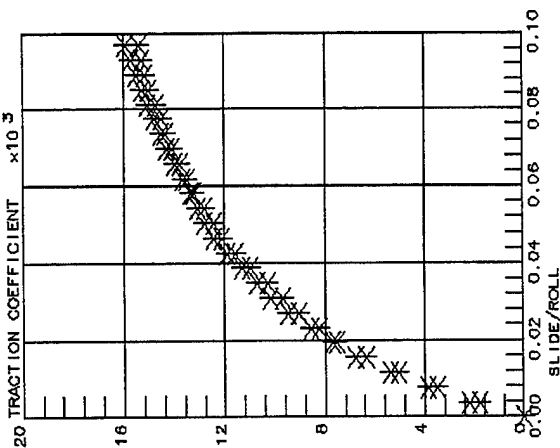
of Points Modified = 2



BP 91-119 Pennzane
250F 172LBF 7639RPM

#114 FILE: bp250h

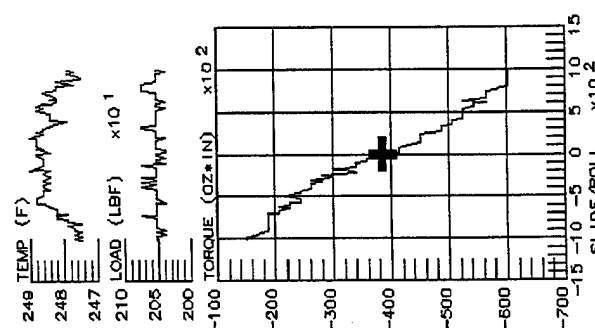
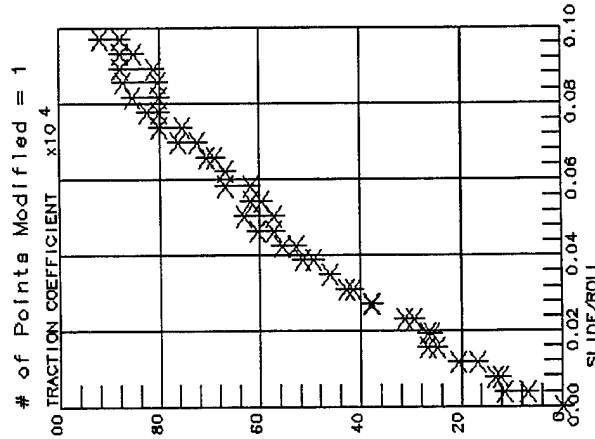
of Points Modified = 0



BP 91-119 Pennzane
250F 211LBF 1019RPM

#115 FILE: bp250h

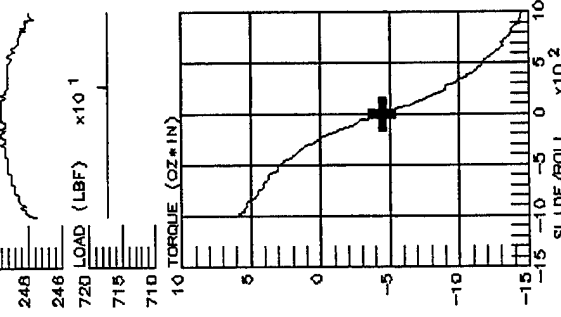
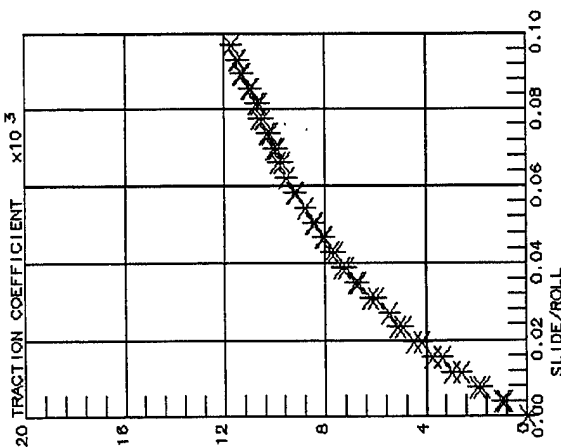
of Points Modified = 1



BP 91-119 Pennzane
250F 72LBF 1019RPM

#116 FILE: bp250h

of Points Modified = 4

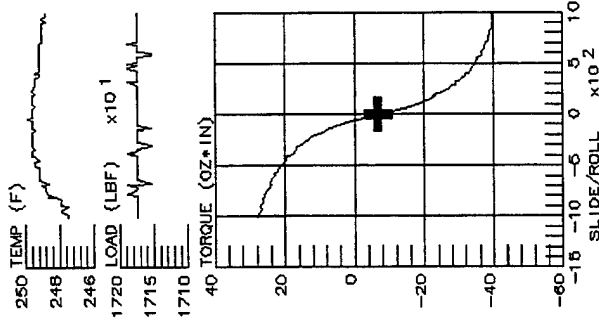
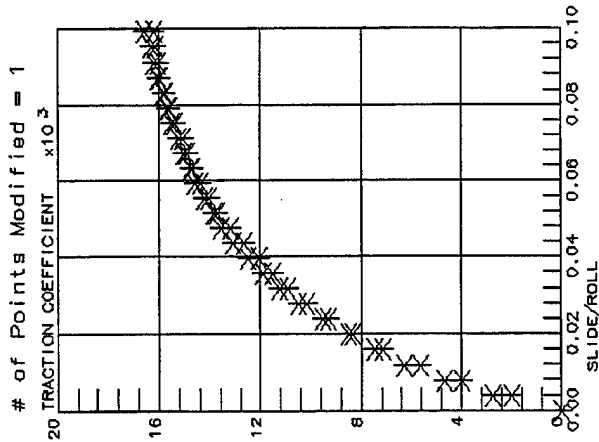


BP 91-119 Pennzane
250F 172LBF 1019RPM

9 FILE: bp250h

#117

of Points Modified = 1

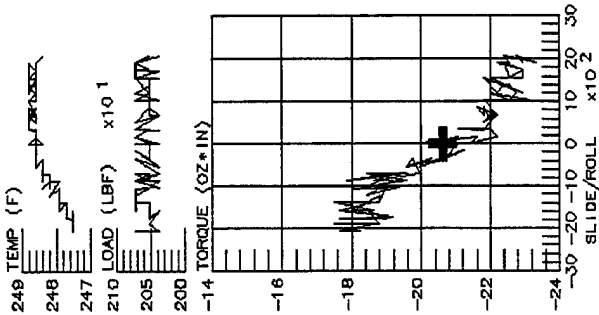
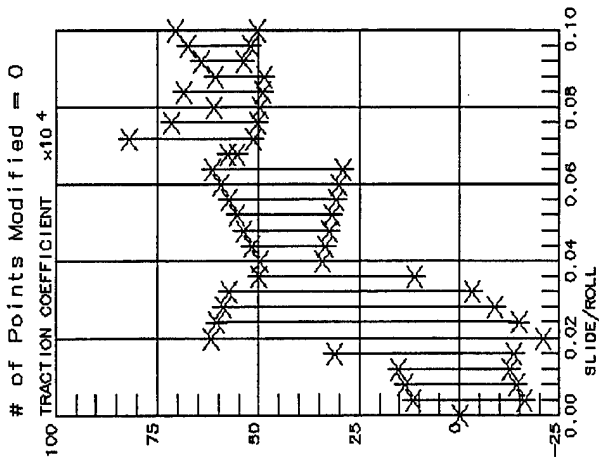


BP 91-119 Pennzane
250F 21LBF 76RPM

1 FILE: bp250l

#118

of Points Modified = 0

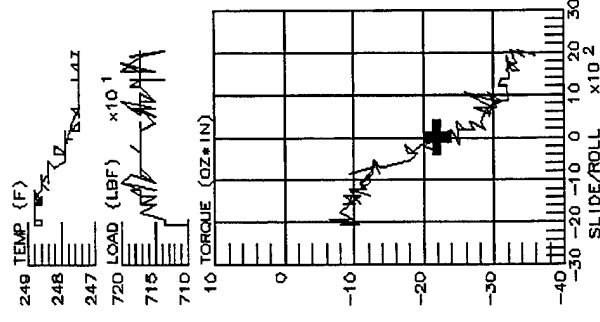
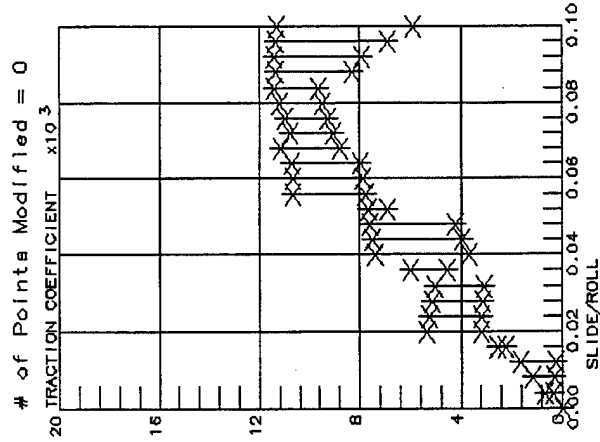


BP 91-119 Pennzane
250F 72LBF 76RPM

2 FILE: bp250l

#119

of Points Modified = 0

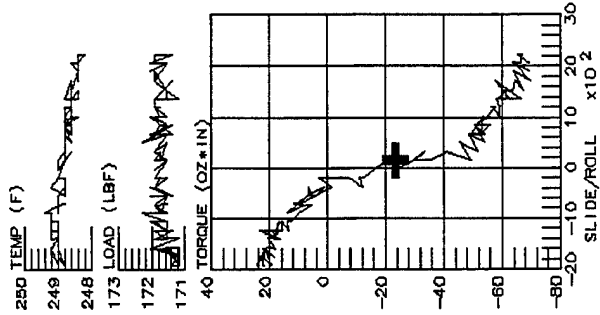
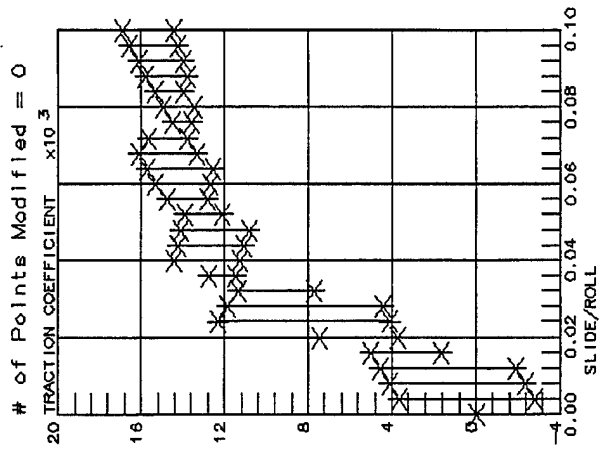


BP 91-119 Pennzane
250F 172LBF 76RPM

3 FILE: bp250l

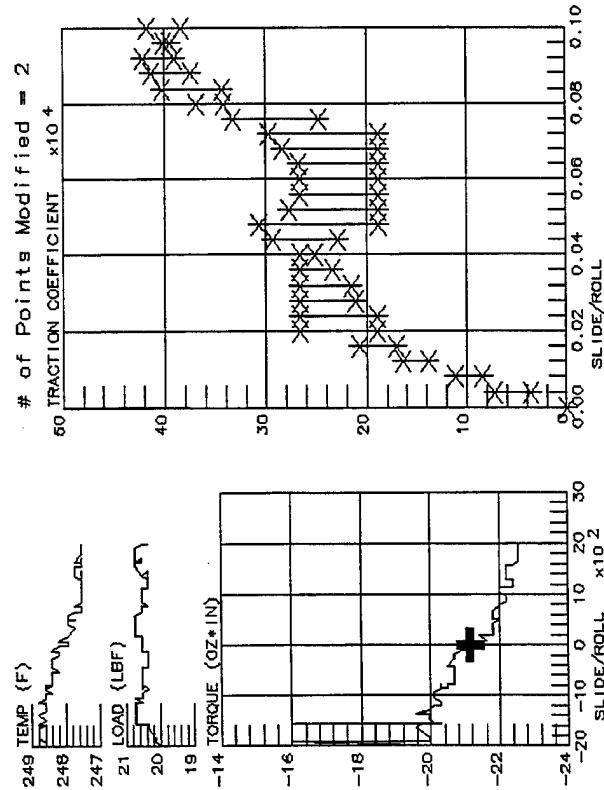
#120

of Points Modified = 0



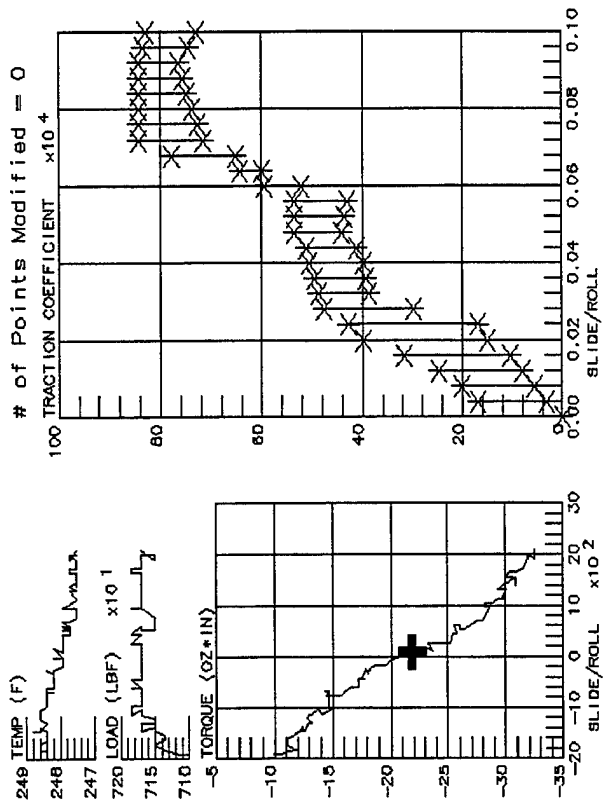
BP 91-119 Pennzane 250F 21LBF 152RPM 4 FILE: bp2501 #121

of Points Modified = 2



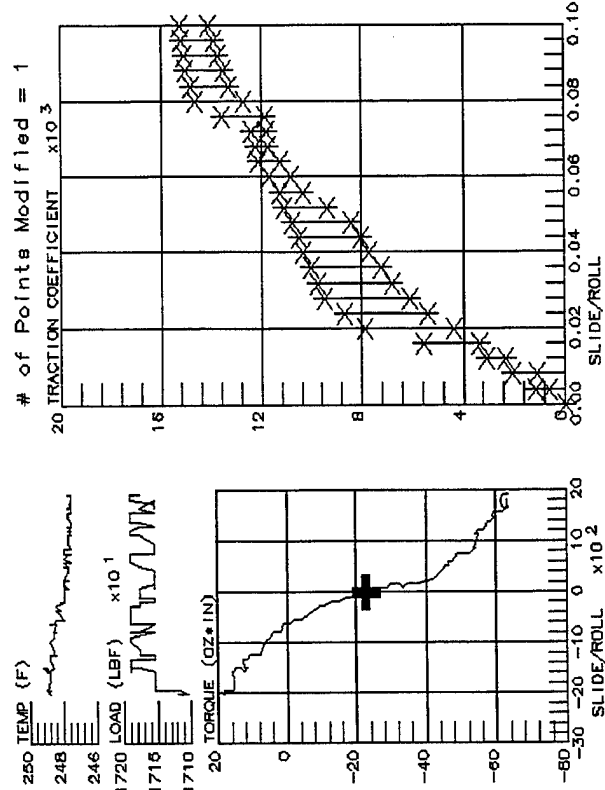
BP 91-119 Pennzane 250F 72LBF 162RPM 5 FILE: bp2501 #122

of Points Modified = 0



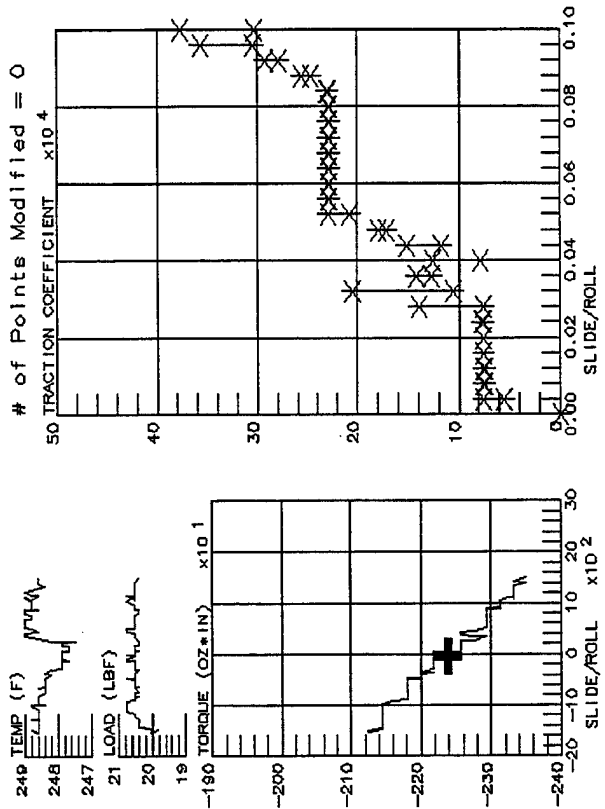
BP 91-119 Pennzane 250F 172LBF 152RPM 6 FILE: bp2501 #123

of Points Modified = 1



BP 91-119 Pennzane 250F 21LBF 343RPM 7 FILE: bp2501 #124

of Points Modified = 0

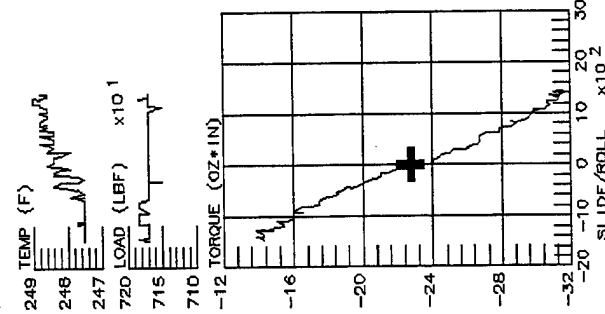
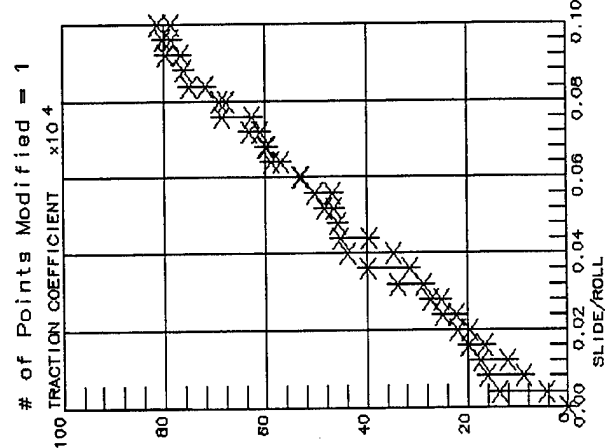


BP 91-119 Pennzane
250F 72LBF 343RPM

8 FILE: bp2501

#125

of Points Modified = 1

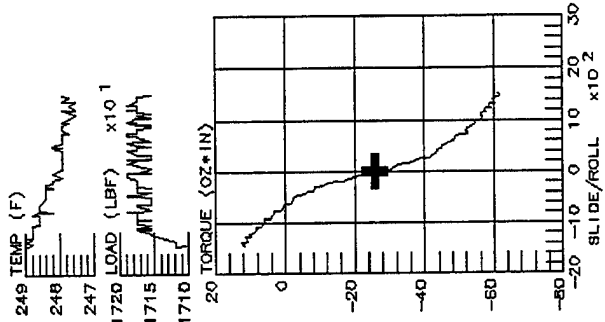
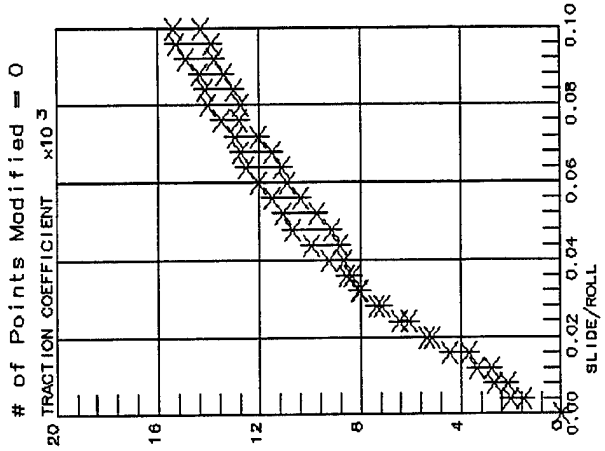


BP 91-119 Pennzane
250F 172LBF 343RPM

9 FILE: bp2501

#126

of Points Modified = 0

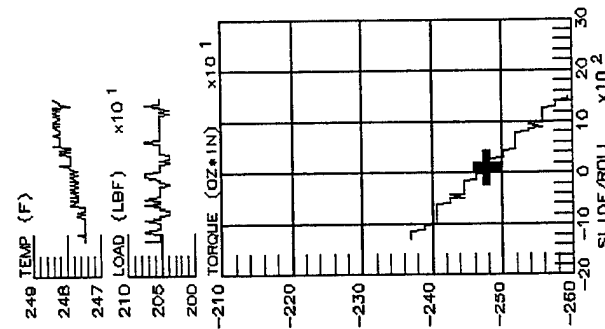
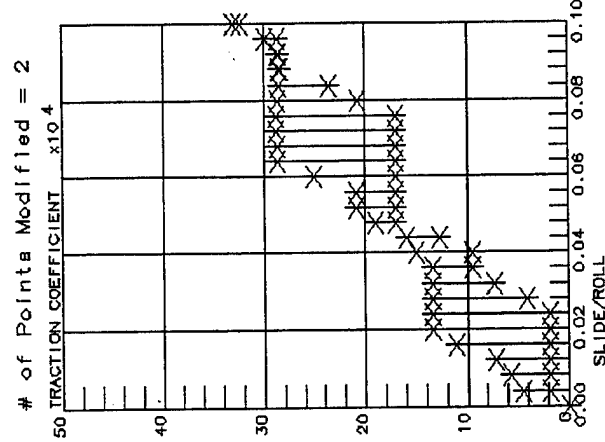


BP 91-119 Pennzane
250F 211BF 1298RPM

10 FILE: bp2501

#127

of Points Modified = 2

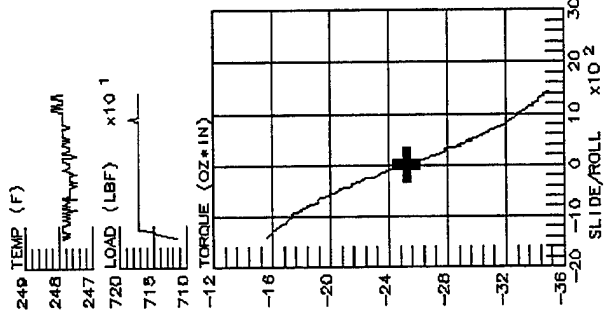
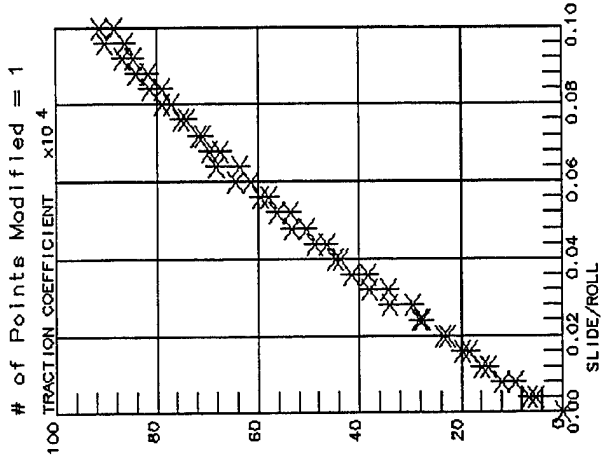


BP 91-119 Pennzane
250F 72LBF 1298RPM

11 FILE: bp2501

#128

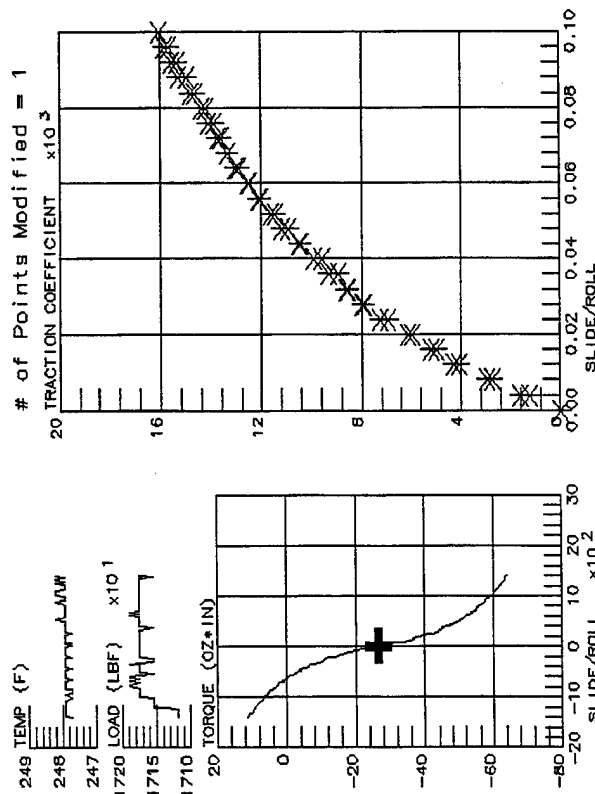
of Points Modified = 1



BP 91-119 Pennzane
250F 172LBF 1298RPM

#129
12 FILE: bp2501

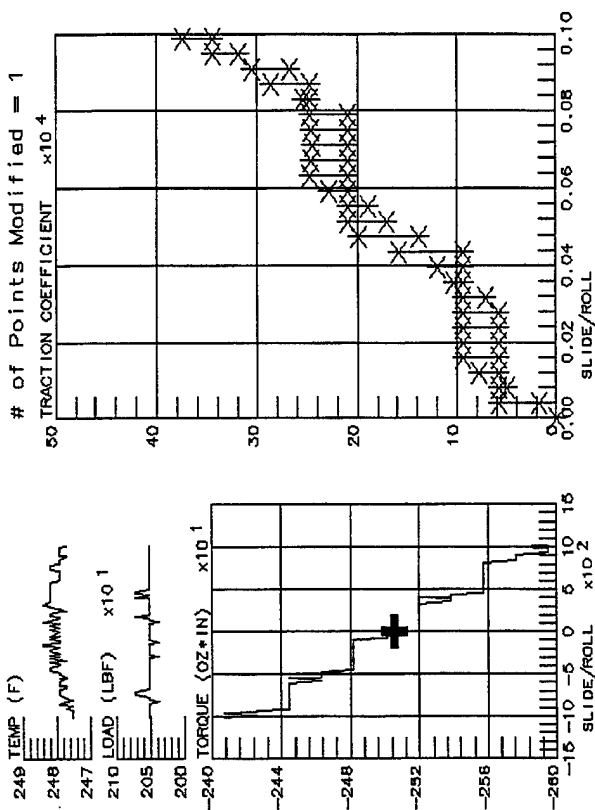
of Points Modified = 1



BP 91-119 Pennzane
250F 21LBF 2559RPM

#130
13 FILE: bp2501

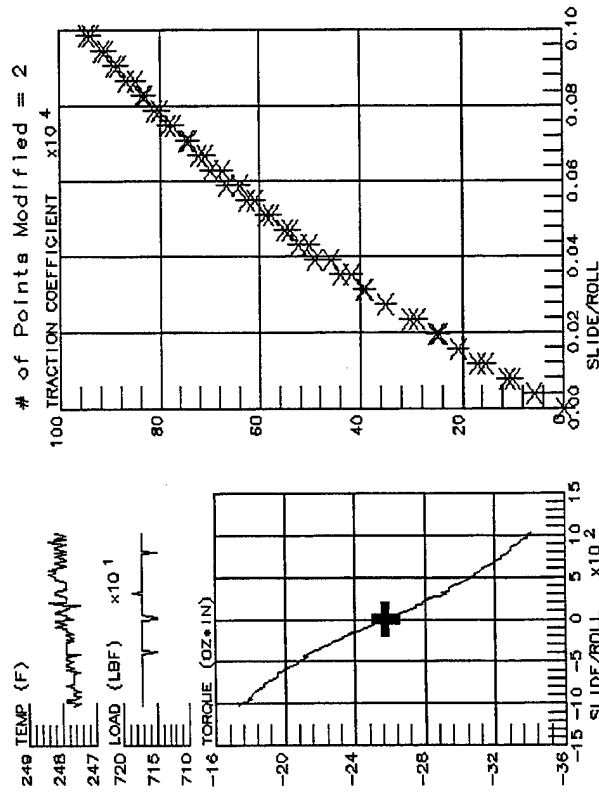
of Points Modified = 1



BP 91-119 Pennzane
250F 72LBF 2559RPM

#131
14 FILE: bp2501

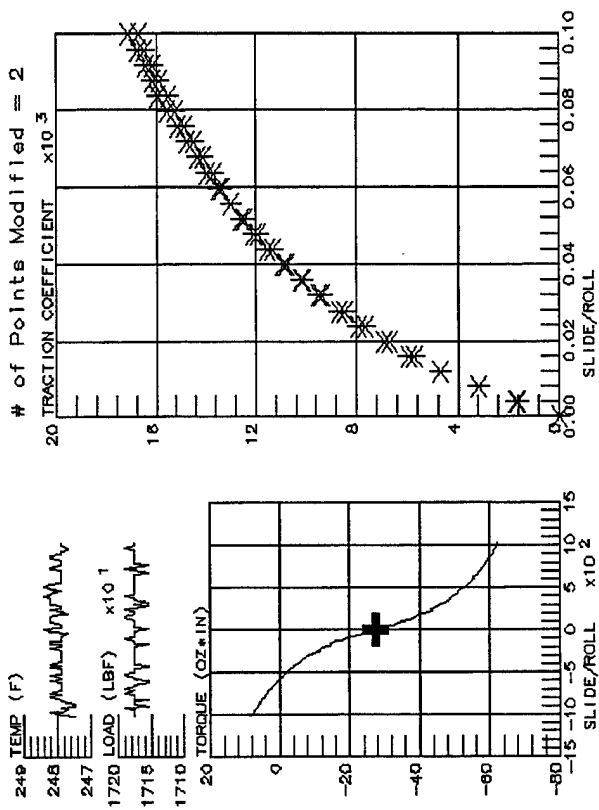
of Points Modified = 2



BP 91-119 Pennzane
250F 172LBF 2559RPM

#132
15 FILE: bp2501

of Points Modified = 2

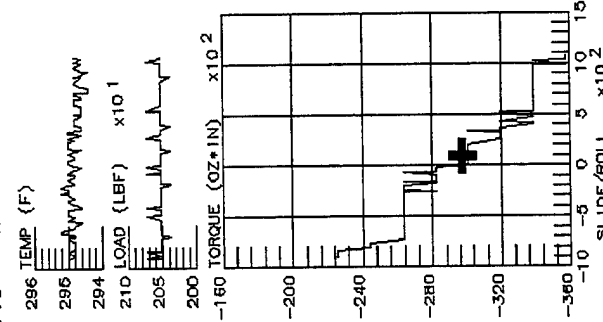
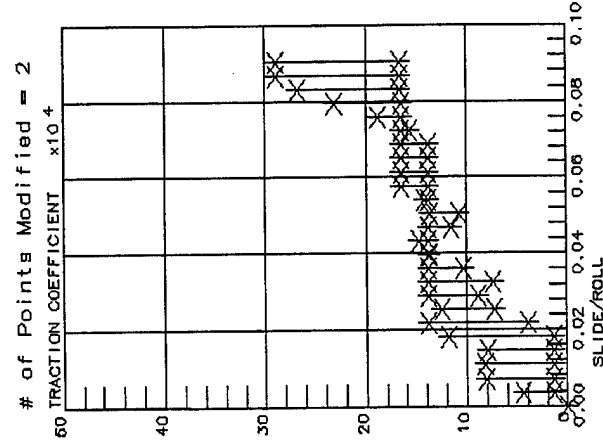


BP 91-119 Pennzane
300F 21LBF 5080RPM

1 FILE: bp300h

#133

of Points Modified = 2

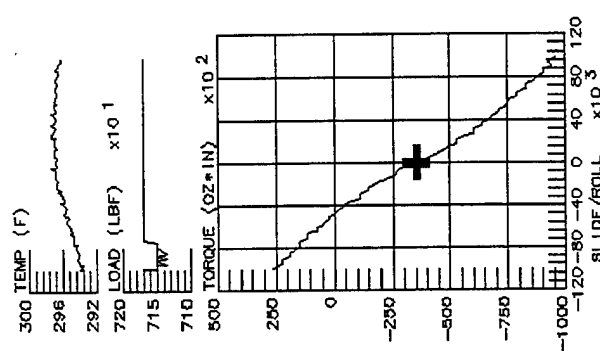
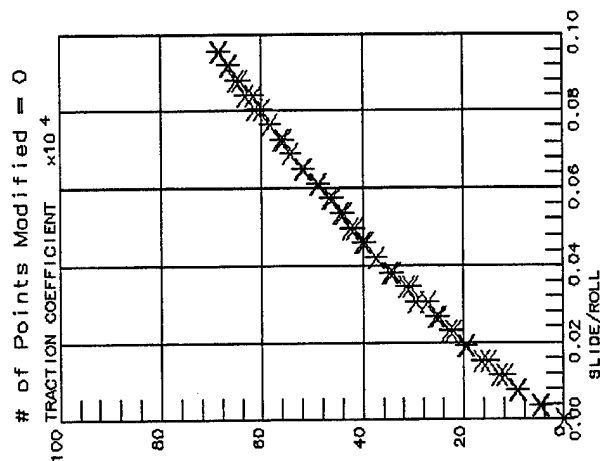


BP 91-119 Pennzane
300F 72LBF 5080RPM

2 FILE: bp300h

#134

of Points Modified = 0

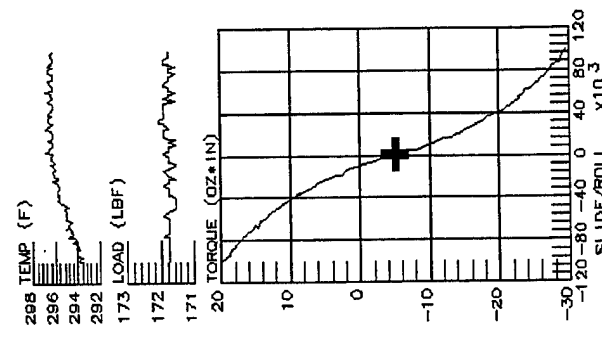
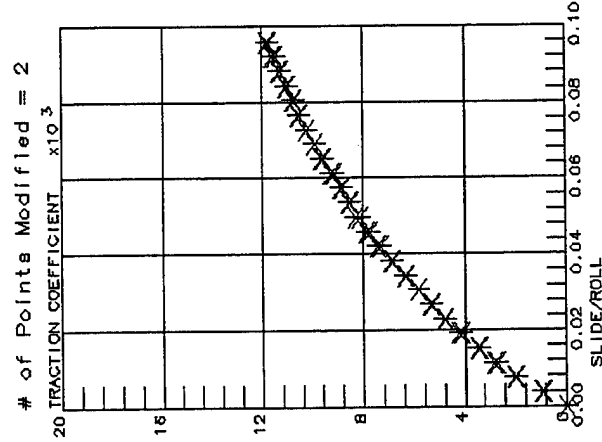


BP 91-119 Pennzane
300F 172LBF 5080RPM

3 FILE: bp300h

#135

of Points Modified = 2

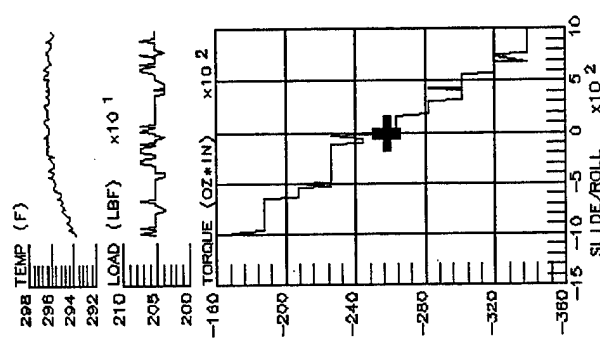
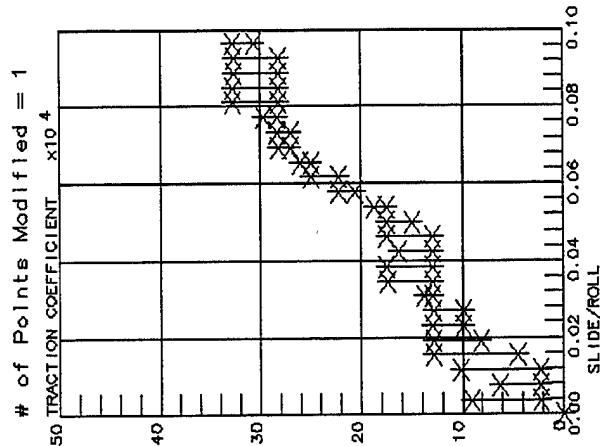


BP 91-119 Pennzane
300F 21LBF 7639RPM

4 FILE: bp300h

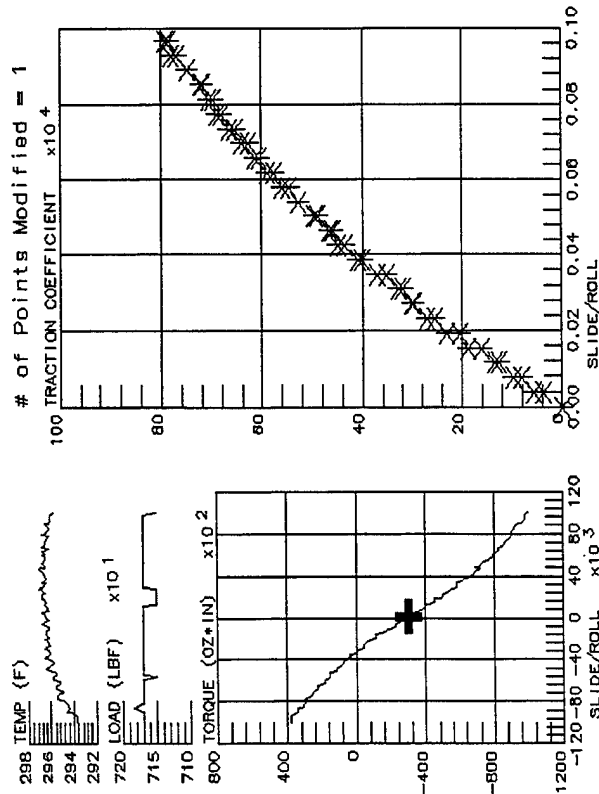
#136

of Points Modified = 1



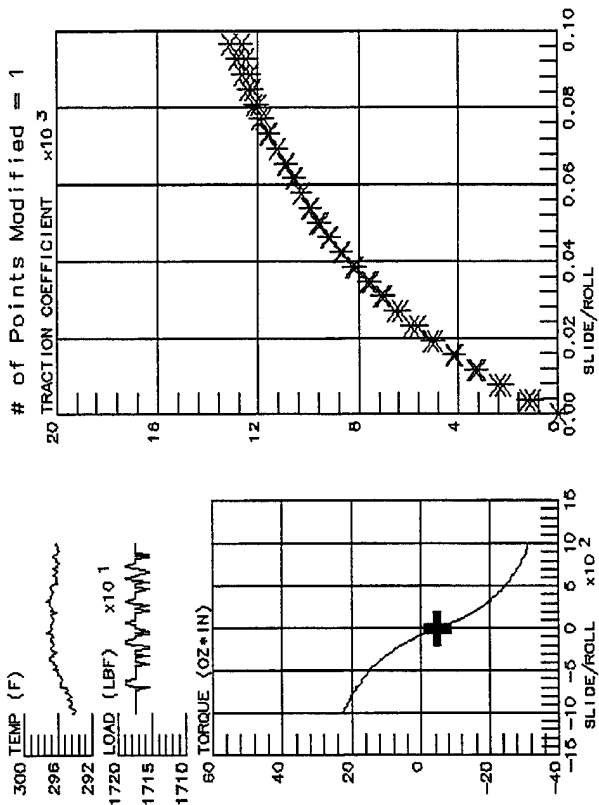
BP 91-119 Pennzane 300F 72LBF 7639RPM 5 FILE: bp300h #137

of Points Modified = 1



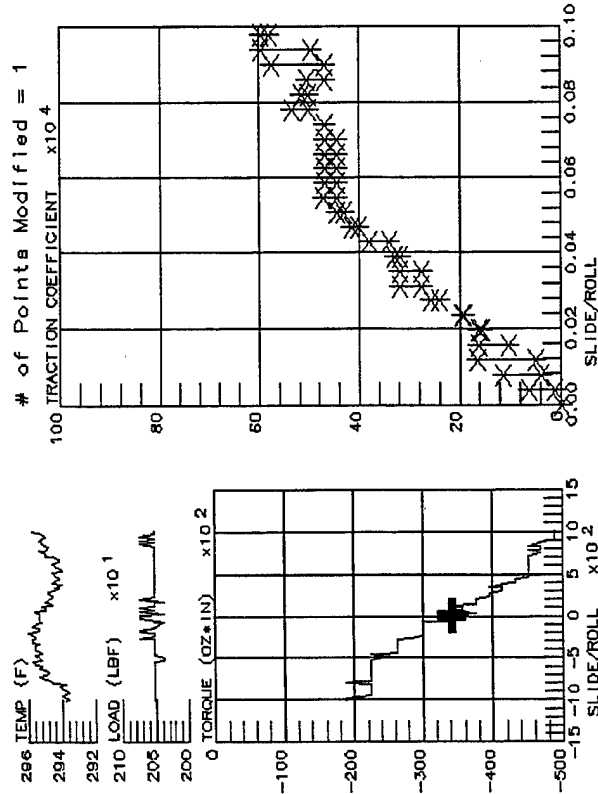
BP 91-119 Pennzane 300F 172LBF 7639RPM 6 FILE: bp300h #138

of Points Modified = 1



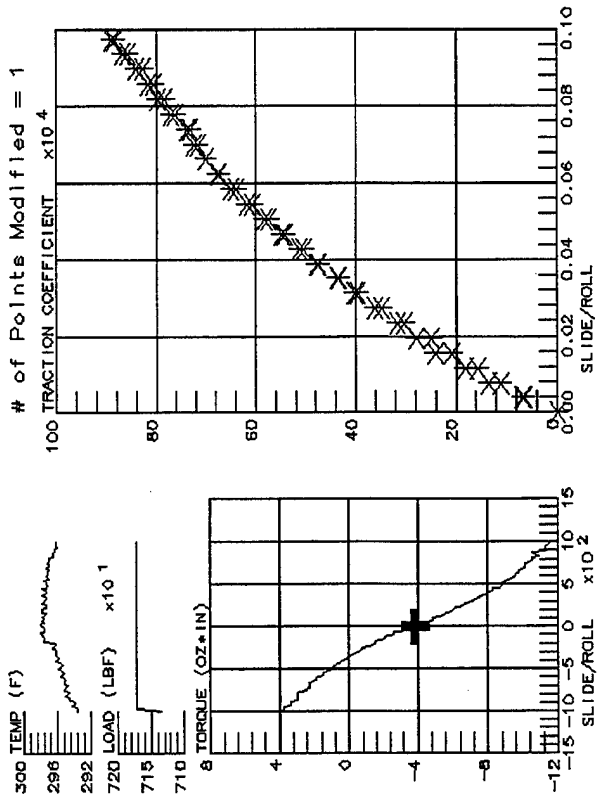
BP 91-119 Pennzane 300F 211LBF 1019RPM 7 FILE: bp300h #139

of Points Modified = 1



BP 91-119 Pennzane 300F 72LBF 1019RPM 8 FILE: bp300h #140

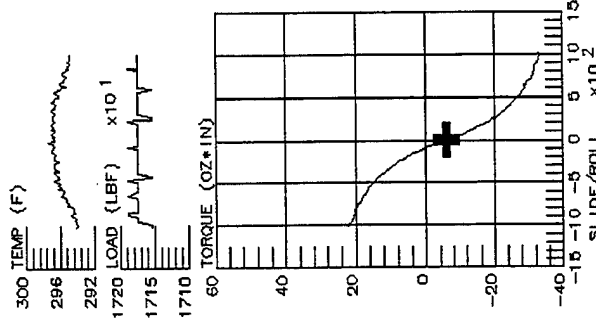
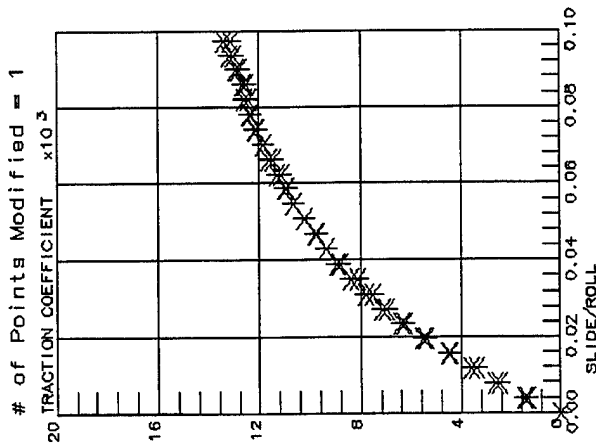
of Points Modified = 1



BP 91-119 Pennzane
300F 172LBF 1019RPM

9 FILE: bp300h

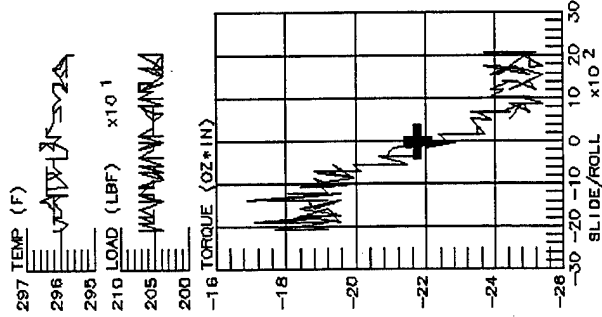
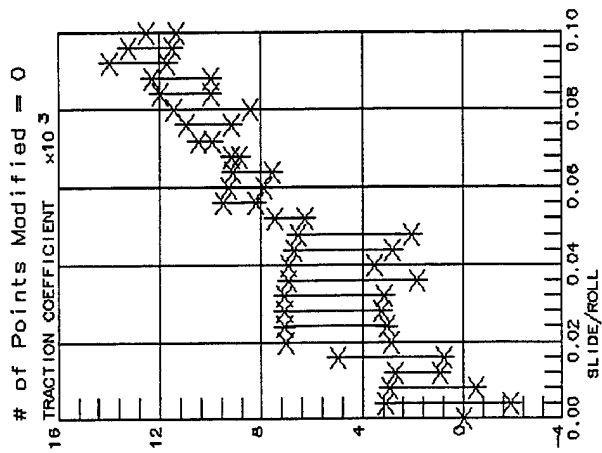
#141



BP 91-119 Pennzane
300F 21LBF 76RPM

1 FILE: bp300l

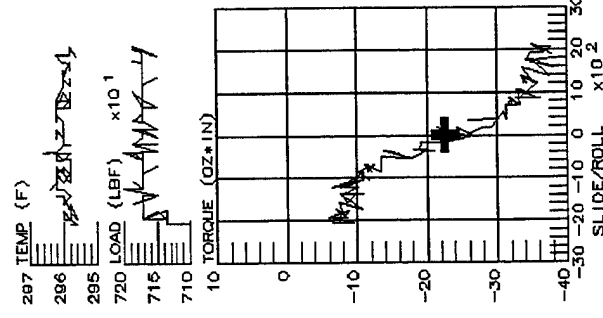
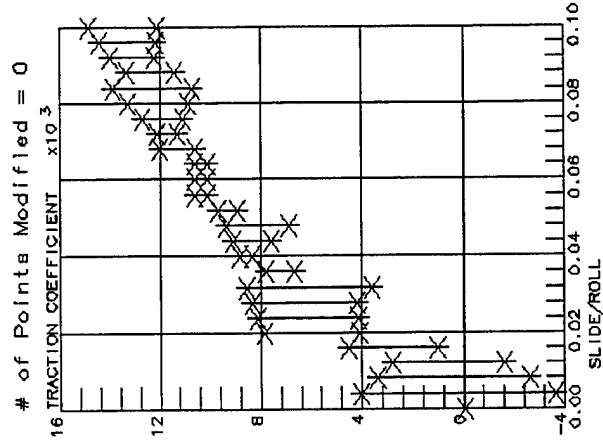
#142



BP 91-119 Pennzane
300F 72LBF 76RPM

2 FILE: bp300l

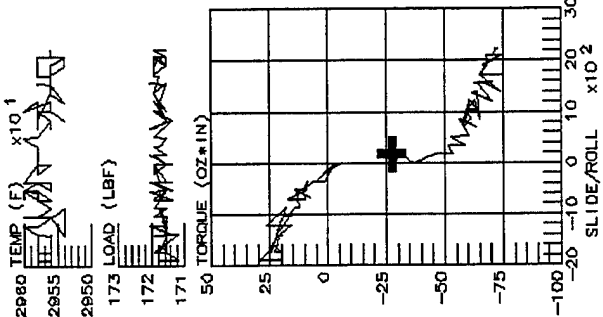
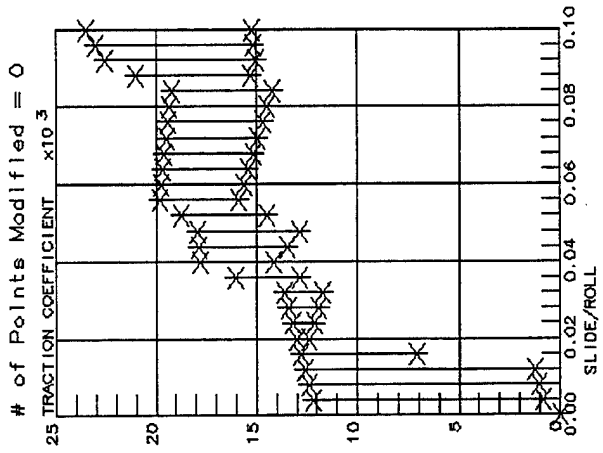
#143



BP 91-119 Pennzane
300F 172LBF 76RPM

3 FILE: bp300l

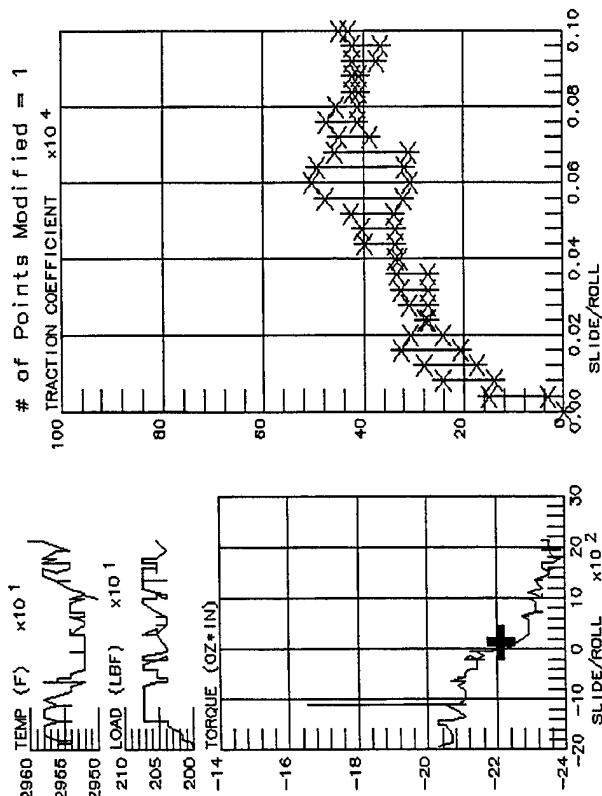
#144



BP 91-119 Pennzane
300F 21LBF 152RPM

#145 FILE: bp3001

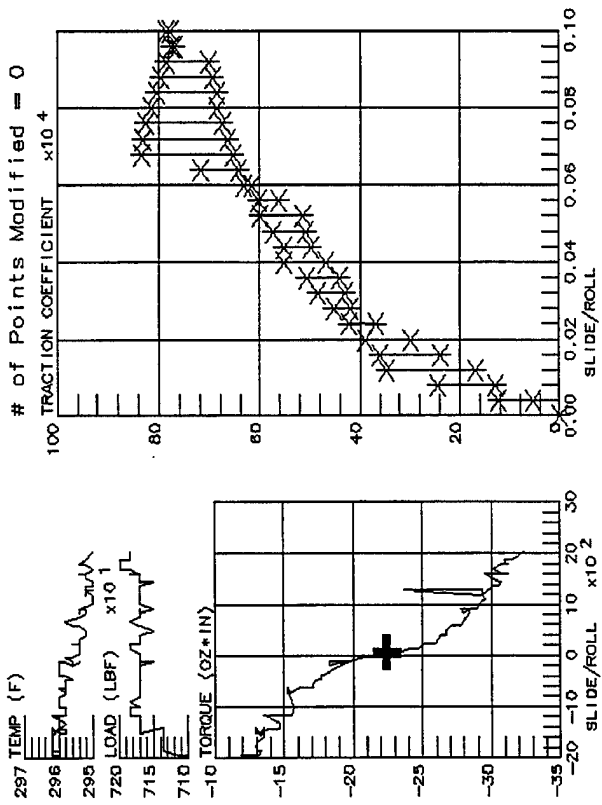
of Points Modified = 1



BP 91-119 Pennzane
300F 72LBF 152RPM

#148 FILE: bp3001

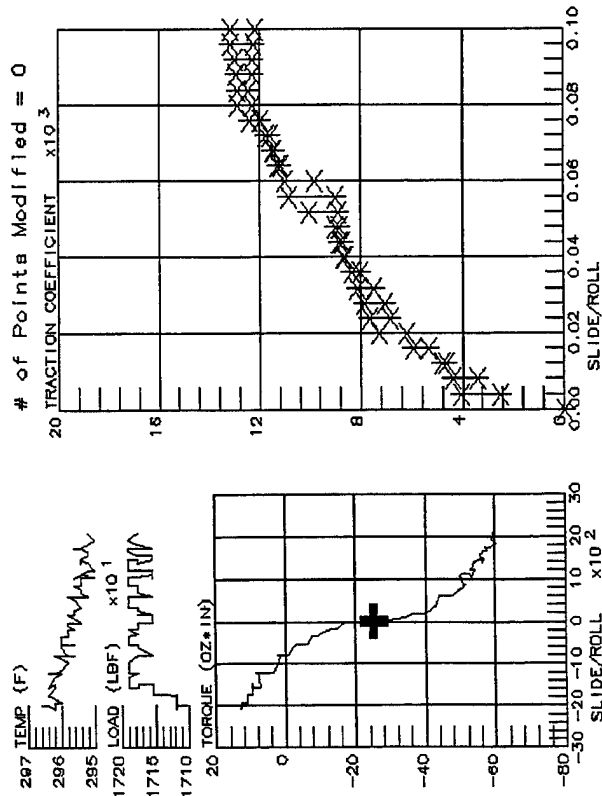
of Points Modified = 0



BP 91-119 Pennzane
300F 172LBF 152RPM

#147 FILE: bp3001

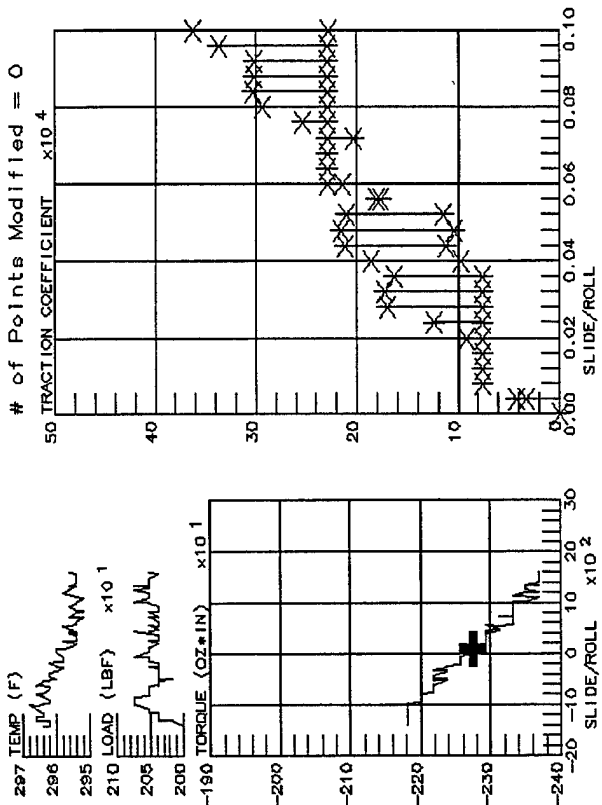
of Points Modified = 0



BP 91-119 Pennzane
300F 21LBF 343RPM

#148 FILE: bp3001

of Points Modified = 0

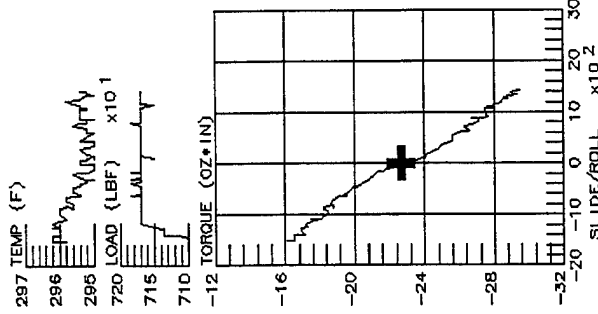
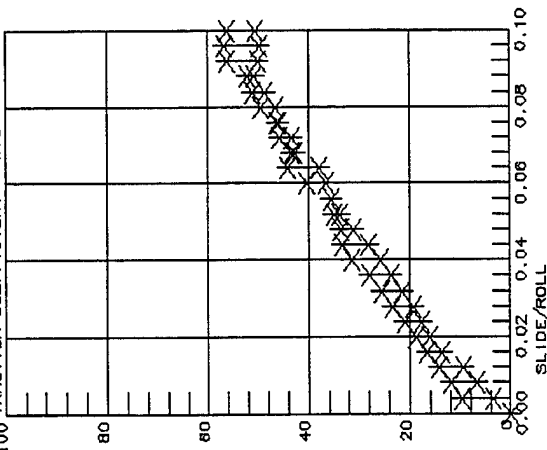


BP 91-119 Pennzane
300F 72LBF 343RPM

8 FILE: bp3001

#149

of Points Modified = 3
TRACTION COEFFICIENT $\times 10^4$

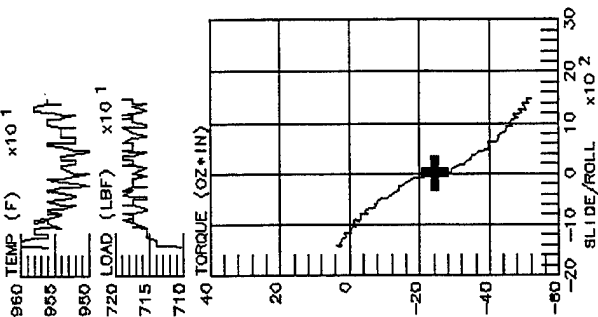
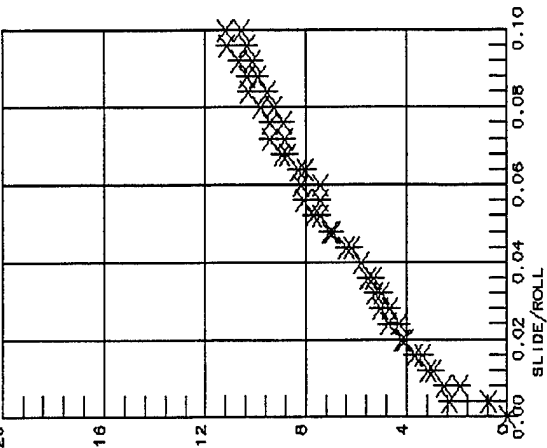


BP 91-119 Pennzane
300F 172LBF 343RPM

9 FILE: bp3001

#150

of Points Modified = 0
TRACTION COEFFICIENT $\times 10^3$

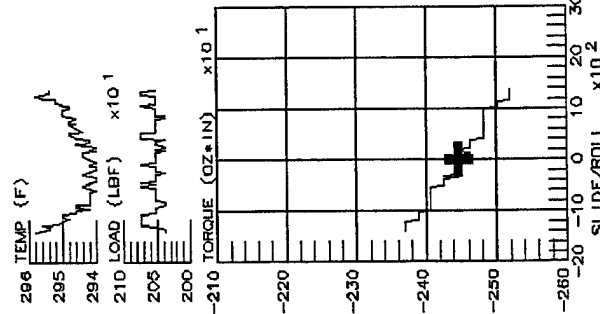
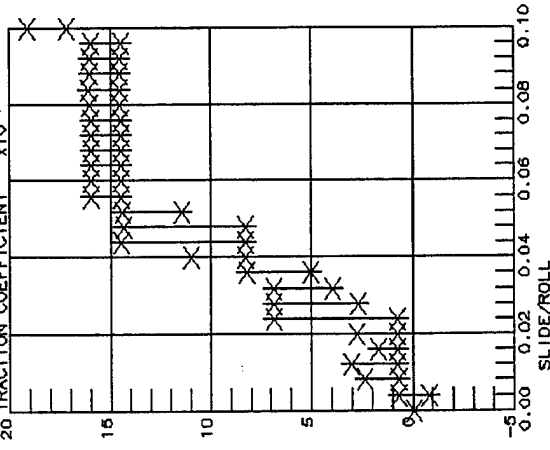


BP 91-119 Pennzane
300F 21LBF 1298RPM

10 FILE: bp3001

#151

of Points Modified = 3
TRACTION COEFFICIENT $\times 10^4$

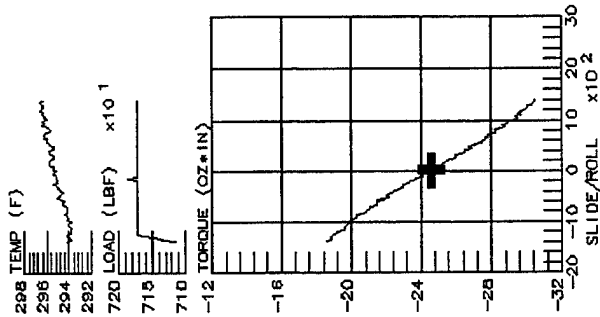
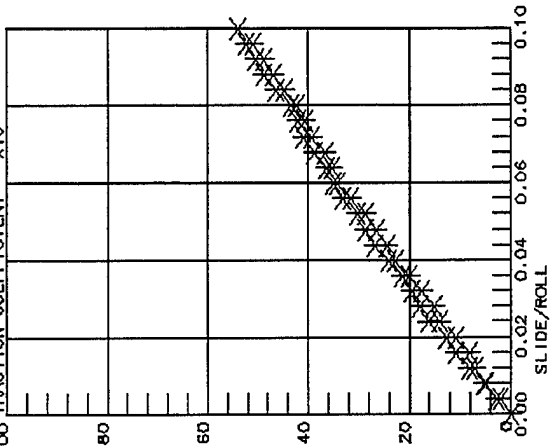


BP 91-119 Pennzane
300F 72LBF 1298RPM

11 FILE: bp3001

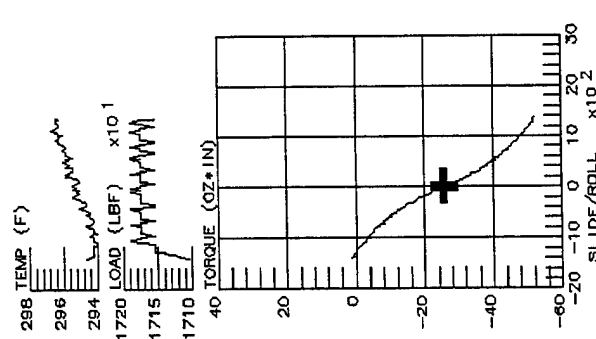
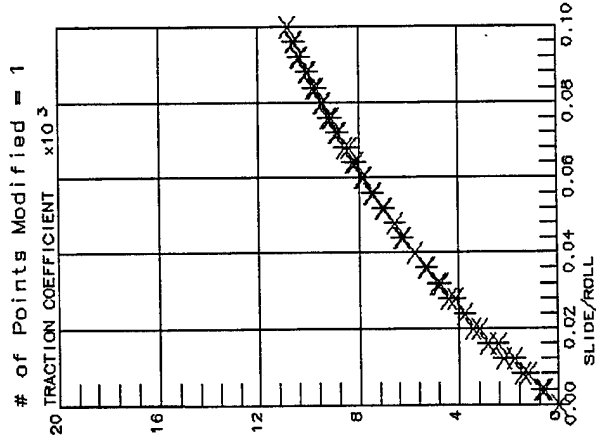
#152

of Points Modified = 0
TRACTION COEFFICIENT $\times 10^4$



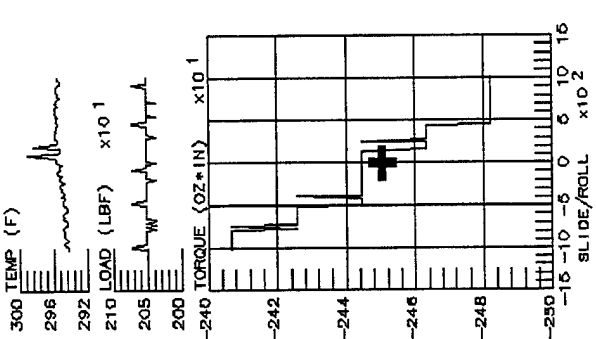
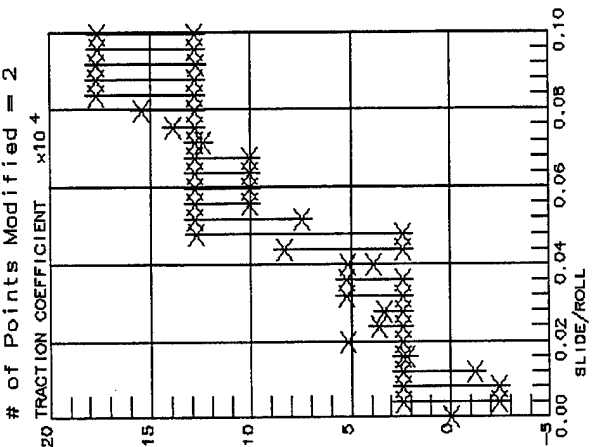
BP 91-119 Pennzane
300F 172LBF 1298RPM

#153
12 FILE: bp3001



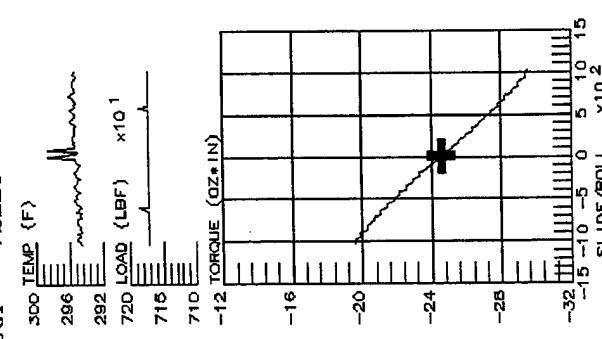
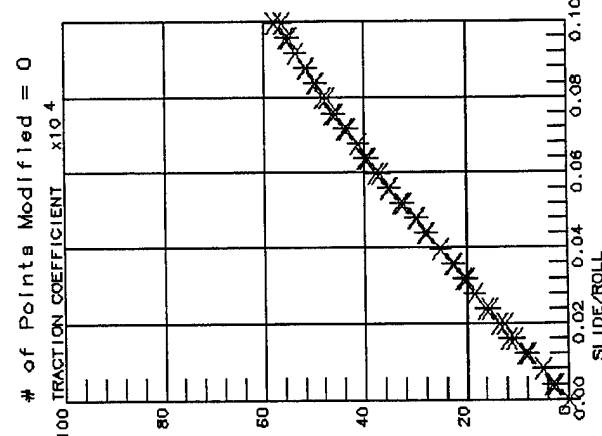
BP 91-119 Pennzane
300F 21LBF 2559RPM

#154
13 FILE: bp3001



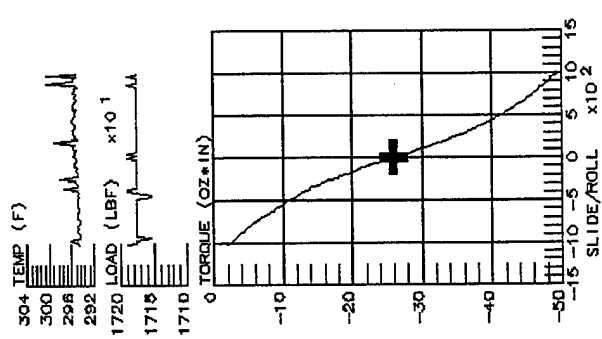
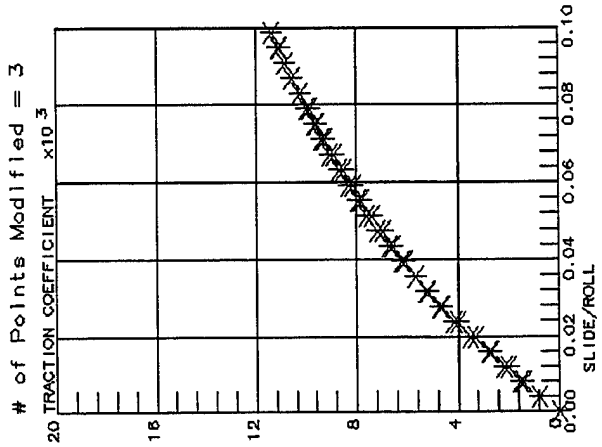
BP 91-119 Pennzane
300F 72LBF 2559RPM

#155
14 FILE: bp3001



BP 91-119 Pennzane
300F 172LBF 2559RPM

#156
15 FILE: bp3001



14. Traction Data Set M: 89-180 VistaLube 7

Data set name: CC 89-180 Vistalube 7
 Rolling radii [Disks 1 & 2] (in): 0.75 0.75
 Crown radii [Disks 1 & 2] (in): 1.00 1.10

Number of data sets found = 335

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 1 | 80.00 | 0.46 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.68E-03 | vist-01 #1 |
| 2 | 80.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.60E-04 | vist-01 #2 |
| 3 | 80.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.18E-04 | vist-01 #3 |
| 4 | 80.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.76E-04 | vist-01 #4 |
| 5 | 80.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.59E-05 | vist-01 #5 |
| 6 | 80.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.44E-05 | vist-01 #6 |
| 7 | 80.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.14E-05 | vist-01 #7 |
| 8 | 80.00 | 0.46 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.56E-03 | vist-01 #8 |
| 9 | 80.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.97E-03 | vist-01 #9 |
| 10 | 80.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.90E-04 | vist-01 #10 |
| 11 | 80.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-04 | vist-01 #11 |
| 12 | 80.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.21E-05 | vist-01 #12 |
| 13 | 80.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.25E-05 | vist-01 #13 |
| 14 | 80.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.36E-05 | vist-01 #14 |
| 15 | 80.00 | 0.46 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.49E-03 | vist-01 #15 |
| 16 | 80.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.53E-03 | vist-01 #16 |
| 17 | 80.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.73E-04 | vist-01 #17 |
| 18 | 80.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.84E-04 | vist-01 #18 |
| 19 | 80.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.81E-05 | vist-01 #19 |
| 20 | 80.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.05E-05 | vist-01 #20 |
| 21 | 80.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.56E-05 | vist-01 #21 |
| 22 | 100.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.10E-03 | vist-02 #1 |
| 23 | 100.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.44E-04 | vist-02 #2 |
| 24 | 100.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.67E-05 | vist-02 #3 |
| 25 | 100.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.06E-05 | vist-02 #4 |
| 26 | 100.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.21E-05 | vist-02 #5 |
| 27 | 100.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.54E-05 | vist-02 #6 |
| 28 | 100.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.90E-04 | vist-02 #7 |
| 29 | 100.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.50E-04 | vist-02 #8 |
| 30 | 100.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-04 | vist-02 #9 |
| 31 | 100.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.09E-05 | vist-02 #10 |
| 32 | 100.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.99E-05 | vist-02 #11 |
| 33 | 100.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.19E-05 | vist-02 #12 |
| 34 | 100.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.12E-04 | vist-02 #13 |
| 35 | 100.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.47E-04 | vist-02 #14 |
| 36 | 100.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.10E-05 | vist-02 #15 |
| 37 | 100.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.30E-05 | vist-02 #16 |
| 38 | 100.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.51E-04 | vist-02 #17 |
| 39 | 100.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-04 | vist-02 #18 |
| 40 | 150.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.41E-04 | vist-03 #1 |
| 41 | 150.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-04 | vist-03 #2 |
| 42 | 150.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.82E-05 | vist-03 #3 |
| 43 | 150.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.88E-05 | vist-03 #4 |
| 44 | 150.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.24E-05 | vist-03 #5 |
| 45 | 150.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-04 | vist-03 #6 |
| 46 | 150.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.05E-03 | vist-03 #7 |
| 47 | 150.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.93E-04 | vist-03 #8 |
| 48 | 150.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.29E-05 | vist-03 #9 |
| 49 | 150.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.53E-05 | vist-03 #10 |
| 50 | 150.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.83E-05 | vist-03 #11 |

Data set: CC 89-180 Vistalube 7continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|----------|----------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 51 | 150.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.21E-05 | vist-03 #12 |
| 52 | 150.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.30E-03 | vist-03 #13 |
| 53 | 150.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.71E-04 | vist-03 #14 |
| 54 | 150.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.91E-05 | vist-03 #15 |
| 55 | 150.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 92 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.04E-04 | vist-03 #16 |
| 56 | 150.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.15E-05 | vist-03x #1 |
| 57 | 150.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-04 | vist-03x #2 |
| 58 | 150.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.40E-05 | vist-03z #1 |
| 59 | 150.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.86E-05 | vist-03z #2 |
| 60 | 200.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.08E-03 | vist-04 #1 |
| 61 | 200.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | vist-04 #2 |
| 62 | 200.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.43E-05 | vist-04 #3 |
| 63 | 200.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.24E-05 | vist-04 #4 |
| 64 | 200.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.49E-05 | vist-04 #5 |
| 65 | 200.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.45E-05 | vist-04 #6 |
| 66 | 200.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.48E-04 | vist-04 #7 |
| 67 | 200.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.94E-05 | vist-04 #8 |
| 68 | 200.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.97E-05 | vist-04 #9 |
| 69 | 200.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.23E-05 | vist-04 #10 |
| 70 | 200.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.22E-05 | vist-04 #11 |
| 71 | 200.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.23E-05 | vist-04 #12 |
| 72 | 200.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-03 | vist-04 #13 |
| 73 | 200.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.22E-04 | vist-04 #14 |
| 74 | 200.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-04 | vist-04 #15 |
| 75 | 200.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.49E-05 | vist-04 #16 |
| 76 | 200.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.02E-05 | vist-04 #17 |
| 77 | 200.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.36E-05 | vist-04 #18 |
| 78 | 250.00 | 0.46 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.53E-03 | vist-05 #1 |
| 79 | 250.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.25E-04 | vist-05 #2 |
| 80 | 250.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.22E-04 | vist-05 #3 |
| 81 | 250.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.04E-06 | vist-05 #4 |
| 82 | 250.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.45E-05 | vist-05 #5 |
| 83 | 250.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.80E-05 | vist-05 #6 |
| 84 | 250.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.59E-05 | vist-05 #7 |
| 85 | 250.00 | 0.46 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.56E-03 | vist-05 #8 |
| 86 | 250.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.92E-04 | vist-05 #9 |
| 87 | 250.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.97E-05 | vist-05 #10 |
| 88 | 250.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.58E-05 | vist-05 #11 |
| 89 | 250.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.05E-05 | vist-05 #12 |
| 90 | 250.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.62E-05 | vist-05 #13 |
| 91 | 250.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.48E-05 | vist-05 #14 |
| 92 | 250.00 | 0.46 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-02 | vist-05 #15 |
| 93 | 250.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.44E-04 | vist-05 #16 |
| 94 | 250.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.10E-04 | vist-05 #17 |
| 95 | 250.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.29E-05 | vist-05 #18 |
| 96 | 250.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.46E-05 | vist-05 #19 |
| 97 | 250.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.22E-05 | vist-05 #20 |
| 98 | 250.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.55E-05 | vist-05 #21 |
| 99 | 300.00 | 0.46 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.79E-02 | vist-06 #1 |
| 100 | 300.00 | 1.57 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.39E-04 | vist-06 #2 |
| 101 | 300.00 | 3.72 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.60E-04 | vist-06 #3 |
| 102 | 300.00 | 12.55 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.02E-05 | vist-06 #4 |
| 103 | 300.00 | 29.76 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.69E-06 | vist-06 #5 |
| 104 | 300.00 | 58.13 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.41E-05 | vist-06 #6 |
| 105 | 300.00 | 100.47 | 4826.00 | 5334.00 | 5080.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.32E-05 | vist-06 #7 |
| 106 | 300.00 | 0.46 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.35E-03 | vist-06 #8 |
| 107 | 300.00 | 1.57 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.57E-04 | vist-06 #9 |
| 108 | 300.00 | 3.72 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.09E-04 | vist-06 #10 |
| 109 | 300.00 | 12.55 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.97E-05 | vist-06 #11 |
| 110 | 300.00 | 29.76 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.15E-05 | vist-06 #12 |
| 111 | 300.00 | 58.13 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-05 | vist-06 #13 |
| 112 | 300.00 | 100.47 | 7259.00 | 8019.00 | 7639.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.30E-06 | vist-06 #14 |
| 113 | 300.00 | 0.46 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.20E-02 | vist-06 #15 |
| 114 | 300.00 | 1.57 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.68E-04 | vist-06 #16 |
| 115 | 300.00 | 3.72 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.75E-04 | vist-06 #17 |
| 116 | 300.00 | 12.55 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.43E-05 | vist-06 #18 |
| 117 | 300.00 | 29.76 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.41E-05 | vist-06 #19 |
| 118 | 300.00 | 58.13 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.28E-05 | vist-06 #20 |
| 119 | 300.00 | 100.47 | 9688.00 | 10708.00 | 10198.00 | 100 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.88E-05 | vist-06 #21 |
| 120 | 80.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.82E-03 | vist-07 #1 |

Data set: CC 89-180 Vistalube 7continued

| | Temp F | Load Lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 121 | 80.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.46E-04 | vist-07 #2 |
| 122 | 80.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-03 | vist-07 #3 |
| 123 | 80.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.23E-03 | vist-07 #4 |
| 124 | 80.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.81E-03 | vist-07 #5 |
| 125 | 80.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.44E-02 | vist-07 #6 |
| 126 | 80.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-03 | vist-07 #7 |
| 127 | 80.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.69E-03 | vist-07 #8 |
| 128 | 80.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.42E-04 | vist-07 #9 |
| 129 | 80.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.72E-03 | vist-07 #10 |
| 130 | 80.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.22E-02 | vist-07 #11 |
| 131 | 80.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.23E-03 | vist-07 #12 |
| 132 | 80.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.85E-04 | vist-07 #13 |
| 133 | 80.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.76E-05 | vist-07 #14 |
| 134 | 80.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-04 | vist-07 #15 |
| 135 | 80.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.95E-04 | vist-07 #16 |
| 136 | 80.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.85E-04 | vist-07 #17 |
| 137 | 80.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-04 | vist-07 #18 |
| 138 | 80.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.84E-05 | vist-07 #19 |
| 139 | 80.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.14E-06 | vist-07 #20 |
| 140 | 80.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.62E-05 | vist-07 #21 |
| 141 | 80.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.28E-05 | vist-07 #22 |
| 142 | 80.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.02E-05 | vist-07 #23 |
| 143 | 80.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.38E-05 | vist-07 #24 |
| 144 | 80.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-04 | vist-07 #25 |
| 145 | 80.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.19E-05 | vist-07 #26 |
| 146 | 80.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.66E-05 | vist-07 #27 |
| 147 | 80.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.15E-05 | vist-07 #28 |
| 148 | 80.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.08E-04 | vist-07 #29 |
| 149 | 80.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.23E-04 | vist-07 #30 |
| 150 | 80.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.24E-03 | vist-07 #31 |
| 151 | 80.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.70E-04 | vist-07 #32 |
| 152 | 80.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-05 | vist-07 #33 |
| 153 | 80.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.33E-05 | vist-07 #34 |
| 154 | 80.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.97E-05 | vist-07 #35 |
| 155 | 80.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-04 | vist-07 #36 |
| 156 | 100.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.93E-03 | vist-08 #1 |
| 157 | 100.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.25E-03 | vist-08 #2 |
| 158 | 100.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.35E-03 | vist-08 #3 |
| 159 | 100.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.34E-02 | vist-08 #4 |
| 160 | 100.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.35E-03 | vist-08 #5 |
| 161 | 100.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.54E-03 | vist-08 #6 |
| 162 | 100.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.33E-03 | vist-08 #7 |
| 163 | 100.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.95E-04 | vist-08 #8 |
| 164 | 100.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.14E-03 | vist-08 #9 |
| 165 | 100.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.60E-03 | vist-08 #10 |
| 166 | 100.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.33E-04 | vist-08 #11 |
| 167 | 100.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.86E-03 | vist-08 #12 |
| 168 | 100.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.40E-04 | vist-08 #13 |
| 169 | 100.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.51E-04 | vist-08 #14 |
| 170 | 100.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.83E-04 | vist-08 #15 |
| 171 | 100.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.77E-04 | vist-08 #16 |
| 172 | 100.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.17E-04 | vist-08 #17 |
| 173 | 100.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.07E-04 | vist-08 #18 |
| 174 | 100.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.21E-04 | vist-08 #19 |
| 175 | 100.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.45E-05 | vist-08 #20 |
| 176 | 100.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.45E-05 | vist-08 #21 |
| 177 | 100.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.24E-04 | vist-08 #22 |
| 178 | 100.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.26E-04 | vist-08 #23 |
| 179 | 100.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.67E-04 | vist-08 #24 |
| 180 | 100.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.59E-04 | vist-08 #25 |
| 181 | 100.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.48E-04 | vist-08 #26 |
| 182 | 100.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.00E-05 | vist-08 #27 |
| 183 | 100.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.30E-05 | vist-08 #28 |
| 184 | 100.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.61E-05 | vist-08 #29 |
| 185 | 100.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.78E-05 | vist-08 #30 |
| 186 | 100.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.17E-04 | vist-08 #31 |
| 187 | 100.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.31E-04 | vist-08 #32 |
| 188 | 100.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.56E-05 | vist-08 #33 |
| 189 | 100.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.74E-05 | vist-08 #34 |
| 190 | 100.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.15E-05 | vist-08 #35 |

Data set: CC 89-180 Vistalube 7continued

| | Temp | Load | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|--------|--------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | F | lbf | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 191 | 100.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-04 | vist-08 #36 |
| 192 | 150.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.75E-03 | vist-09 #1 |
| 193 | 150.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.44E-03 | vist-09 #2 |
| 194 | 150.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-02 | vist-09 #3 |
| 195 | 150.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.26E-02 | vist-09 #4 |
| 196 | 150.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.65E-02 | vist-09 #5 |
| 197 | 150.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.14E-03 | vist-09 #6 |
| 198 | 150.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.38E-04 | vist-09 #7 |
| 199 | 150.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.49E-04 | vist-09 #8 |
| 200 | 150.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.21E-03 | vist-09 #9 |
| 201 | 150.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.42E-03 | vist-09 #10 |
| 202 | 150.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.92E-03 | vist-09 #11 |
| 203 | 150.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.54E-03 | vist-09 #12 |
| 204 | 150.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.53E-03 | vist-09 #13 |
| 205 | 150.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.74E-05 | vist-09 #14 |
| 206 | 150.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.85E-04 | vist-09 #15 |
| 207 | 150.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.68E-04 | vist-09 #16 |
| 208 | 150.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.25E-04 | vist-09 #17 |
| 209 | 150.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.08E-05 | vist-09 #18 |
| 210 | 150.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-03 | vist-09 #19 |
| 211 | 150.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.28E-05 | vist-09 #20 |
| 212 | 150.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.31E-06 | vist-09 #21 |
| 213 | 150.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.15E-05 | vist-09 #22 |
| 214 | 150.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-04 | vist-09 #23 |
| 215 | 150.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.62E-05 | vist-09 #24 |
| 216 | 150.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.38E-04 | vist-09 #25 |
| 217 | 150.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.09E-05 | vist-09 #26 |
| 218 | 150.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.80E-06 | vist-09 #27 |
| 219 | 150.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.23E-05 | vist-09 #28 |
| 220 | 150.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-04 | vist-09 #29 |
| 221 | 150.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.92E-05 | vist-09 #30 |
| 222 | 150.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.09E-04 | vist-09 #31 |
| 223 | 150.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.53E-05 | vist-09 #32 |
| 224 | 150.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.98E-05 | vist-09 #33 |
| 225 | 150.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.92E-05 | vist-09 #34 |
| 226 | 150.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.06E-05 | vist-09 #35 |
| 227 | 150.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.15E-05 | vist-09 #36 |
| 228 | 200.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.99E-03 | vist-10 #1 |
| 229 | 200.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.13E-03 | vist-10 #2 |
| 230 | 200.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.16E-03 | vist-10 #3 |
| 231 | 200.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.06E-02 | vist-10 #4 |
| 232 | 200.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.72E-02 | vist-10 #5 |
| 233 | 200.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.66E-02 | vist-10 #6 |
| 234 | 200.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.05E-03 | vist-10 #7 |
| 235 | 200.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.11E-03 | vist-10 #8 |
| 236 | 200.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.23E-03 | vist-10 #9 |
| 237 | 200.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.72E-03 | vist-10 #10 |
| 238 | 200.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.88E-03 | vist-10 #11 |
| 239 | 200.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.96E-02 | vist-10 #12 |
| 240 | 200.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.64E-03 | vist-10 #13 |
| 241 | 200.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.21E-04 | vist-10 #14 |
| 242 | 200.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.45E-05 | vist-10 #15 |
| 243 | 200.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.31E-04 | vist-10 #16 |
| 244 | 200.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.17E-04 | vist-10 #17 |
| 245 | 200.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.39E-04 | vist-10 #18 |
| 246 | 200.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.56E-04 | vist-10 #19 |
| 247 | 200.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.62E-05 | vist-10 #20 |
| 248 | 200.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.06E-05 | vist-10 #21 |
| 249 | 200.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.79E-04 | vist-10 #22 |
| 250 | 200.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.29E-04 | vist-10 #23 |
| 251 | 200.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.28E-04 | vist-10 #24 |
| 252 | 200.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.39E-04 | vist-10 #25 |
| 253 | 200.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.89E-05 | vist-10 #26 |
| 254 | 200.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.22E-05 | vist-10 #27 |
| 255 | 200.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.61E-06 | vist-10 #28 |
| 256 | 200.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.04E-04 | vist-10 #29 |
| 257 | 200.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.85E-05 | vist-10 #30 |
| 258 | 200.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.35E-04 | vist-10 #31 |
| 259 | 200.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.00E-04 | vist-10 #32 |
| 260 | 200.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.54E-05 | vist-10 #33 |

Data set: CC 89-180 Vistalube 7continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 261 | 200.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.40E-05 | vist-10 #34 |
| 262 | 200.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.93E-05 | vist-10 #35 |
| 263 | 200.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-04 | vist-10 #36 |
| 264 | 250.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.57E-03 | vist-11 #1 |
| 265 | 250.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.82E-03 | vist-11 #2 |
| 266 | 250.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.56E-02 | vist-11 #3 |
| 267 | 250.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.88E-02 | vist-11 #4 |
| 268 | 250.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.01E-02 | vist-11 #5 |
| 269 | 250.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.56E-03 | vist-11 #6 |
| 270 | 250.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.66E-03 | vist-11 #7 |
| 271 | 250.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.33E-03 | vist-11 #8 |
| 272 | 250.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.71E-03 | vist-11 #9 |
| 273 | 250.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.76E-03 | vist-11 #10 |
| 274 | 250.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.29E-03 | vist-11 #11 |
| 275 | 250.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.91E-03 | vist-11 #12 |
| 276 | 250.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.76E-04 | vist-11 #13 |
| 277 | 250.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.58E-04 | vist-11 #14 |
| 278 | 250.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.90E-05 | vist-11 #15 |
| 279 | 250.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.76E-04 | vist-11 #16 |
| 280 | 250.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.85E-04 | vist-11 #17 |
| 281 | 250.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.29E-04 | vist-11 #18 |
| 282 | 250.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | vist-11 #19 |
| 283 | 250.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.50E-04 | vist-11 #20 |
| 284 | 250.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.22E-05 | vist-11 #21 |
| 285 | 250.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.48E-05 | vist-11 #22 |
| 286 | 250.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.63E-04 | vist-11 #23 |
| 287 | 250.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 9.97E-05 | vist-11 #24 |
| 288 | 250.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.87E-04 | vist-11 #25 |
| 289 | 250.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.53E-05 | vist-11 #26 |
| 290 | 250.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-05 | vist-11 #27 |
| 291 | 250.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.62E-05 | vist-11 #28 |
| 292 | 250.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-04 | vist-11 #29 |
| 293 | 250.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-04 | vist-11 #30 |
| 294 | 250.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.35E-04 | vist-11 #31 |
| 295 | 250.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-04 | vist-11 #32 |
| 296 | 250.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.64E-05 | vist-11 #33 |
| 297 | 250.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.93E-05 | vist-11 #34 |
| 298 | 250.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.29E-05 | vist-11 #35 |
| 299 | 250.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.70E-05 | vist-11 #36 |
| 300 | 300.00 | 1.57 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.17E-02 | vist-12 #1 |
| 301 | 300.00 | 3.72 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.50E-03 | vist-12 #2 |
| 302 | 300.00 | 12.55 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.21E-03 | vist-12 #3 |
| 303 | 300.00 | 29.76 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.55E-02 | vist-12 #4 |
| 304 | 300.00 | 58.13 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.12E-02 | vist-12 #5 |
| 305 | 300.00 | 100.47 | 72.00 | 80.00 | 76.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.10E-02 | vist-12 #6 |
| 306 | 300.00 | 1.57 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.27E-03 | vist-12 #7 |
| 307 | 300.00 | 3.72 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.71E-04 | vist-12 #8 |
| 308 | 300.00 | 12.55 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.51E-04 | vist-12 #9 |
| 309 | 300.00 | 29.76 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.53E-03 | vist-12 #10 |
| 310 | 300.00 | 58.13 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.90E-03 | vist-12 #11 |
| 311 | 300.00 | 100.47 | 144.00 | 160.00 | 152.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.08E-03 | vist-12 #12 |
| 312 | 300.00 | 1.57 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.55E-02 | vist-12 #13 |
| 313 | 300.00 | 3.72 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.12E-04 | vist-12 #14 |
| 314 | 300.00 | 12.55 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.30E-05 | vist-12 #15 |
| 315 | 300.00 | 29.76 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.17E-04 | vist-12 #16 |
| 316 | 300.00 | 58.13 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.73E-04 | vist-12 #17 |
| 317 | 300.00 | 100.47 | 325.00 | 360.00 | 342.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 2.68E-04 | vist-12 #18 |
| 318 | 300.00 | 1.57 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.27E-04 | vist-12 #19 |
| 319 | 300.00 | 3.72 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.91E-05 | vist-12 #20 |
| 320 | 300.00 | 12.55 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.25E-04 | vist-12 #21 |
| 321 | 300.00 | 29.76 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.22E-05 | vist-12 #22 |
| 322 | 300.00 | 58.13 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.11E-04 | vist-12 #23 |
| 323 | 300.00 | 100.47 | 617.00 | 682.00 | 649.50 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.38E-05 | vist-12 #24 |
| 324 | 300.00 | 1.57 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.36E-04 | vist-12 #25 |
| 325 | 300.00 | 3.72 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.59E-05 | vist-12 #26 |
| 326 | 300.00 | 12.55 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.61E-05 | vist-12 #27 |
| 327 | 300.00 | 29.76 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 5.47E-05 | vist-12 #28 |
| 328 | 300.00 | 58.13 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 4.02E-05 | vist-12 #29 |
| 329 | 300.00 | 100.47 | 1197.00 | 1323.00 | 1260.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 6.29E-05 | vist-12 #30 |
| 330 | 300.00 | 1.57 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 7.94E-04 | vist-12 #31 |

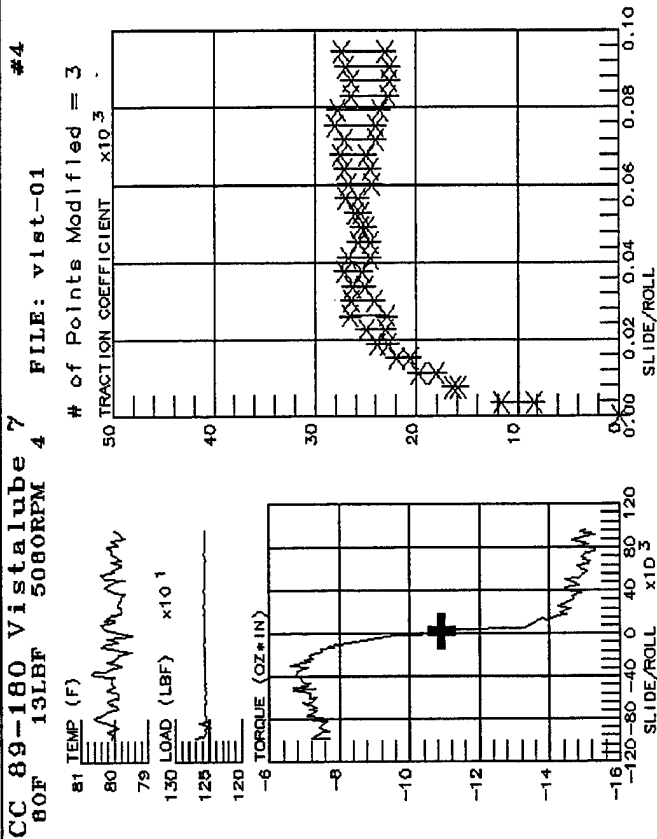
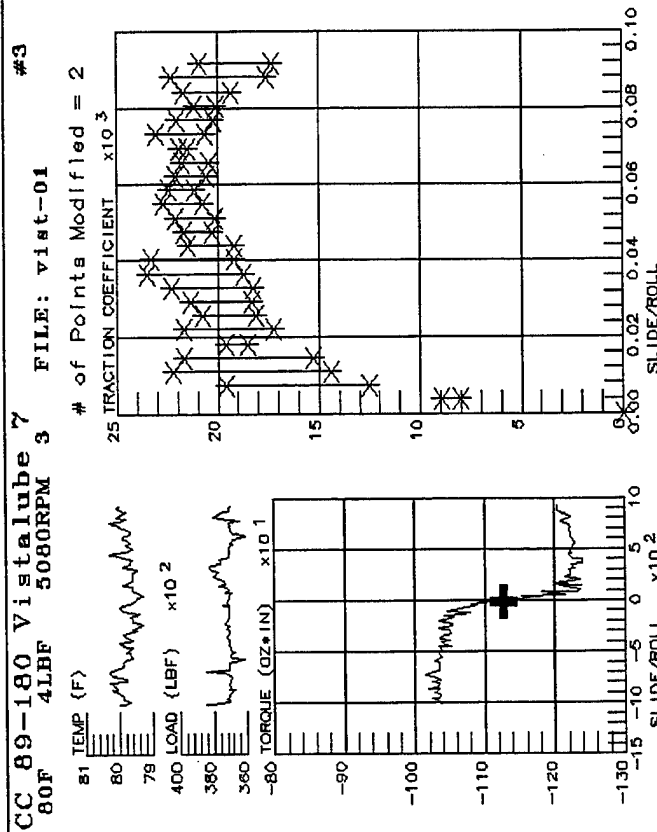
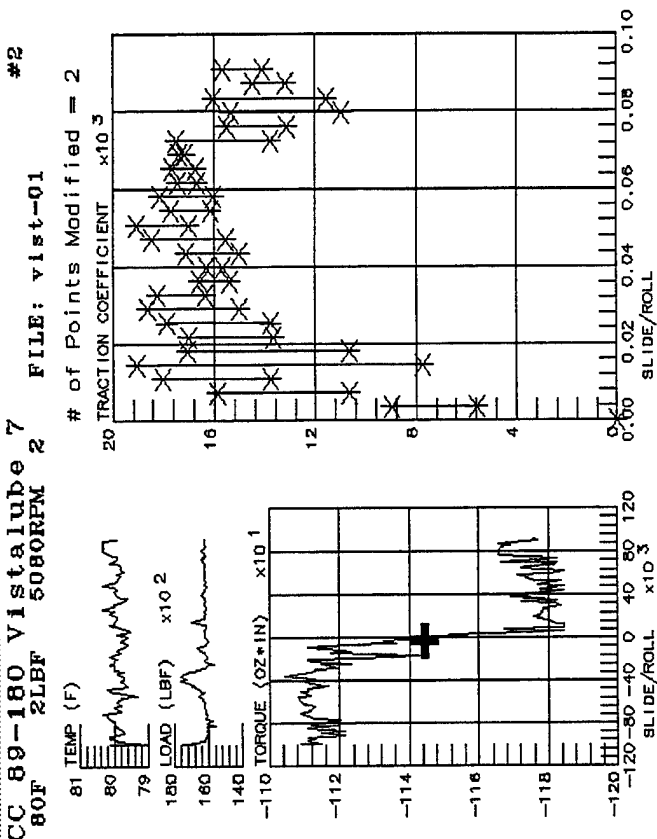
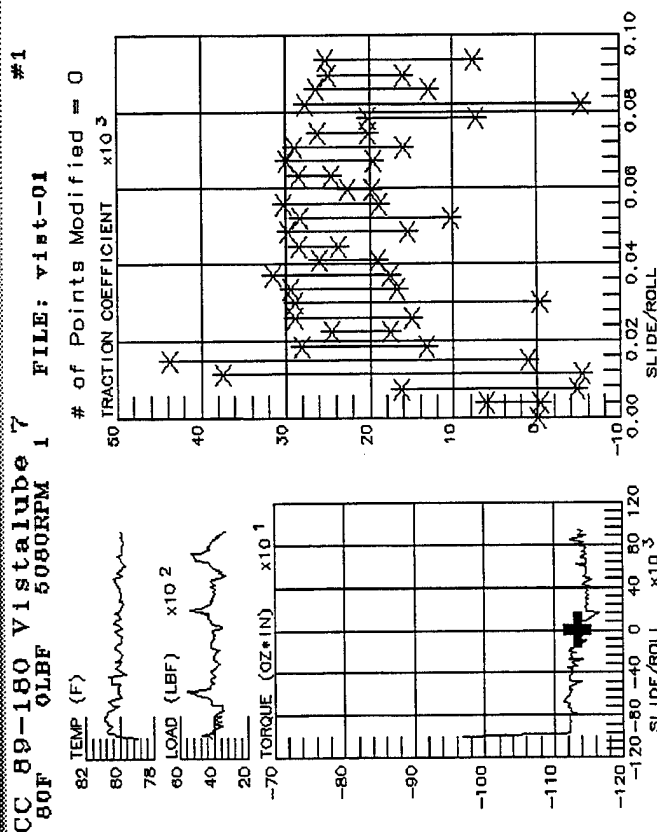
Data set: CC 89-180 Vistalube 7continued

| | Temp F | Load lbf | Rpm1 | Rpm2 | RollRpm | Pts |Calibration Factors..... | | | | | SqDev | Dataset/Test # |
|-----|-----------|-------------|---------|---------|---------|-----|-------------------------------|-------|------|------|------|----------|----------------|
| | | | | | | | Load1 | Load2 | Rpm1 | Rpm2 | Torq | | |
| 331 | 300.00 | 3.72 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.10E-04 | vist-12 #32 |
| 332 | 300.00 | 12.55 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.72E-05 | vist-12 #33 |
| 333 | 300.00 | 29.76 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 1.21E-05 | vist-12 #34 |
| 334 | 300.00 | 58.13 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 3.15E-05 | vist-12 #35 |
| 335 | 300.00 | 100.47 | 2431.00 | 2687.00 | 2559.00 | 50 | 0.71 | 1.49 | 1.00 | 1.00 | 1.00 | 8.93E-05 | vist-12 #36 |

Summary of Select Data Files

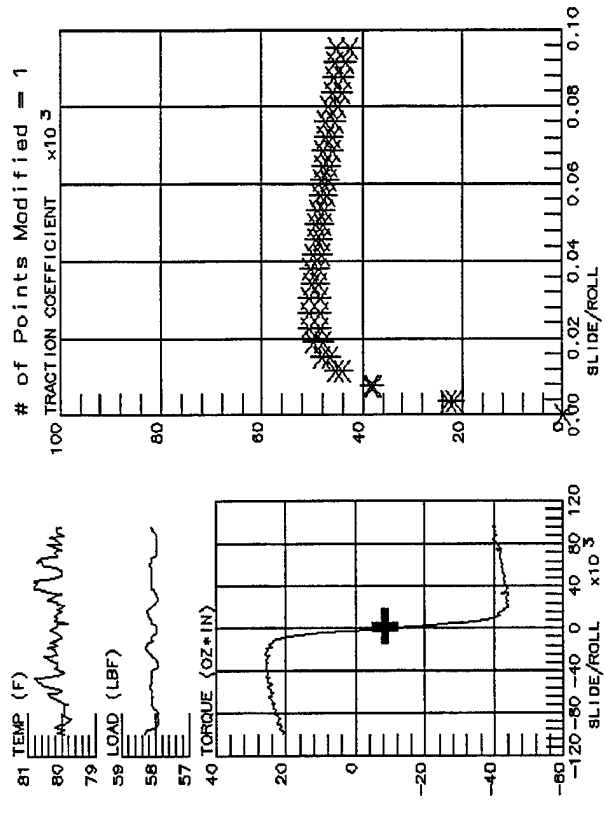
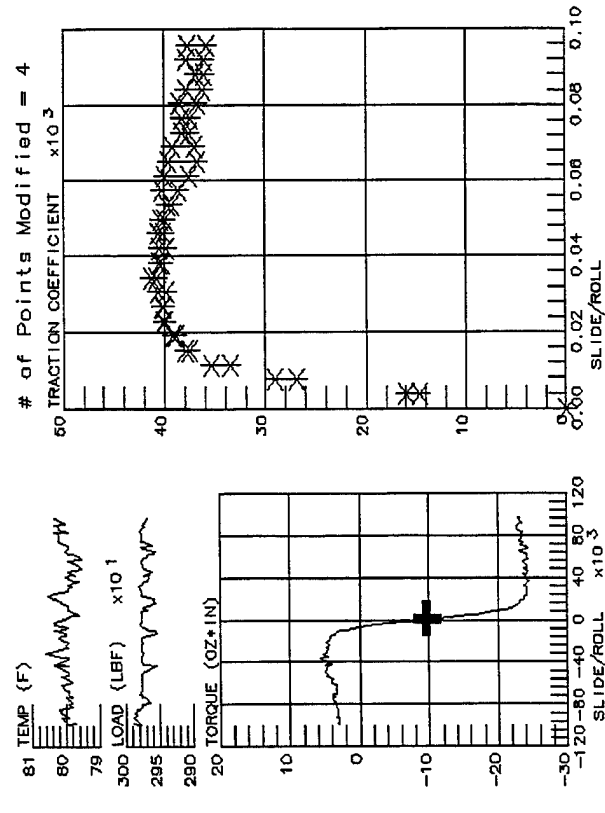
| Filename | Temp | RollRpm | DataCurve # |
|----------|--------|----------|-----------------|
| cc1.dat | 80.00 | 650.00 | 140 141 142 143 |
| cc2.dat | 80.00 | 1260.00 | 146 147 148 149 |
| cc3.dat | 80.00 | 2559.00 | 152 153 154 155 |
| cc4.dat | 80.00 | 5080.00 | 4 5 6 7 |
| cc5.dat | 80.00 | 7639.00 | 11 12 13 14 |
| cc6.dat | 80.00 | 10198.00 | 18 19 20 21 |
| cc7.dat | 100.00 | 650.00 | 176 177 178 179 |
| cc8.dat | 100.00 | 1260.00 | 182 183 184 185 |
| cc9.dat | 100.00 | 2559.00 | 188 189 190 191 |
| cc10.dat | 100.00 | 5080.00 | 24 25 26 27 |
| cc11.dat | 100.00 | 7639.00 | 30 31 32 33 |
| cc12.dat | 100.00 | 10198.00 | 36 37 38 39 |
| cc13.dat | 150.00 | 650.00 | 212 213 214 215 |
| cc14.dat | 150.00 | 1260.00 | 218 219 220 221 |
| cc15.dat | 150.00 | 2559.00 | 224 225 226 227 |
| cc16.dat | 150.00 | 5080.00 | 42 43 44 45 |
| cc17.dat | 150.00 | 7639.00 | 48 49 50 51 |
| cc18.dat | 150.00 | 10198.00 | 54 55 58 59 |
| cc19.dat | 200.00 | 650.00 | 248 249 250 251 |
| cc20.dat | 200.00 | 1260.00 | 254 255 256 257 |
| cc21.dat | 200.00 | 2559.00 | 260 261 262 263 |
| cc22.dat | 200.00 | 5080.00 | 62 63 64 65 |
| cc23.dat | 200.00 | 7639.00 | 68 69 70 71 |
| cc24.dat | 200.00 | 10198.00 | 74 75 76 77 |
| cc25.dat | 250.00 | 650.00 | 284 285 286 287 |
| cc26.dat | 250.00 | 1260.00 | 290 291 292 293 |
| cc27.dat | 250.00 | 2559.00 | 296 297 298 299 |
| cc28.dat | 250.00 | 5080.00 | 81 82 83 84 |
| cc29.dat | 250.00 | 7639.00 | 88 89 90 91 |
| cc30.dat | 250.00 | 10198.00 | 95 96 97 98 |
| cc31.dat | 300.00 | 650.00 | 320 321 322 323 |
| cc32.dat | 300.00 | 1260.00 | 326 327 328 329 |
| cc33.dat | 300.00 | 2559.00 | 332 333 334 335 |
| cc34.dat | 300.00 | 5080.00 | 102 103 104 105 |
| cc35.dat | 300.00 | 7639.00 | 109 110 111 112 |
| cc36.dat | 300.00 | 10198.00 | 116 117 118 119 |

TRACTION MODELS



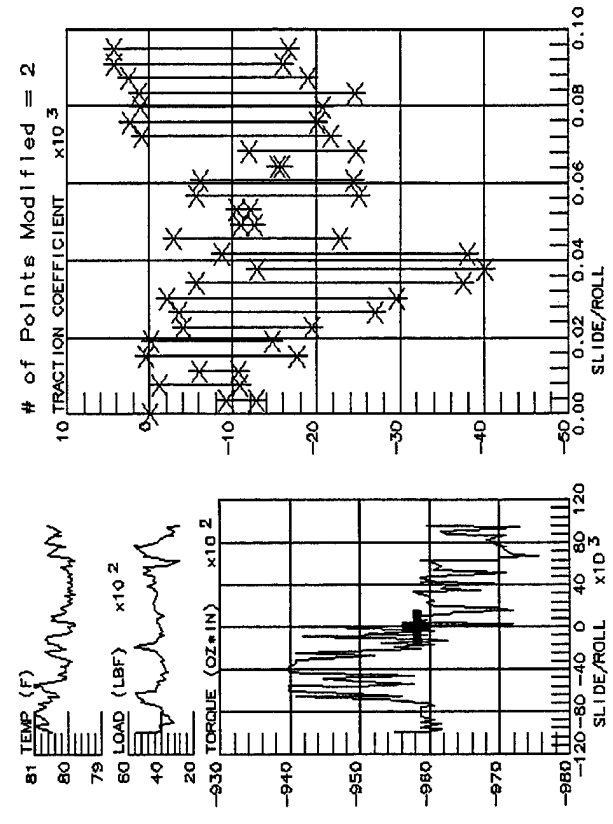
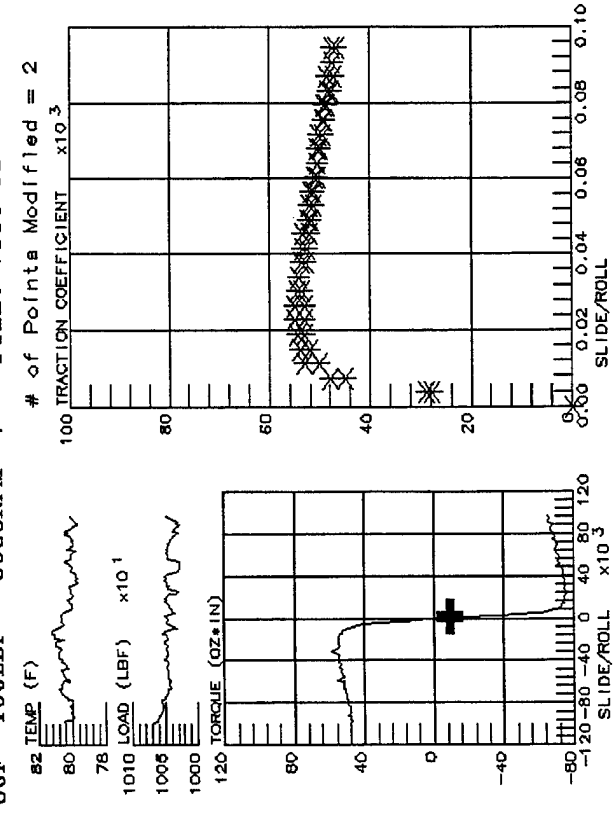
CC 89-180 Vistalube 7
80F 30LBF 5080RPM 5 FILE: v1st-01

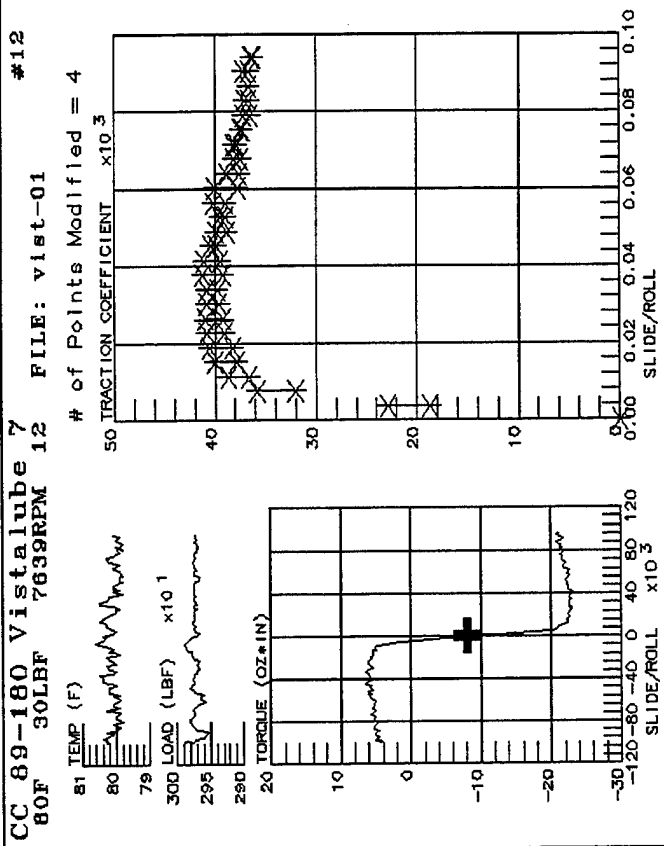
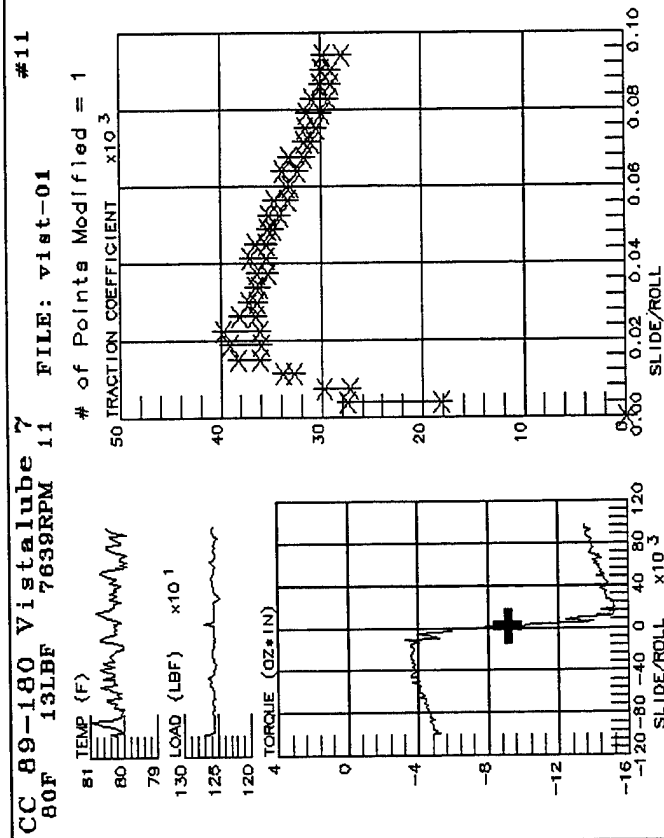
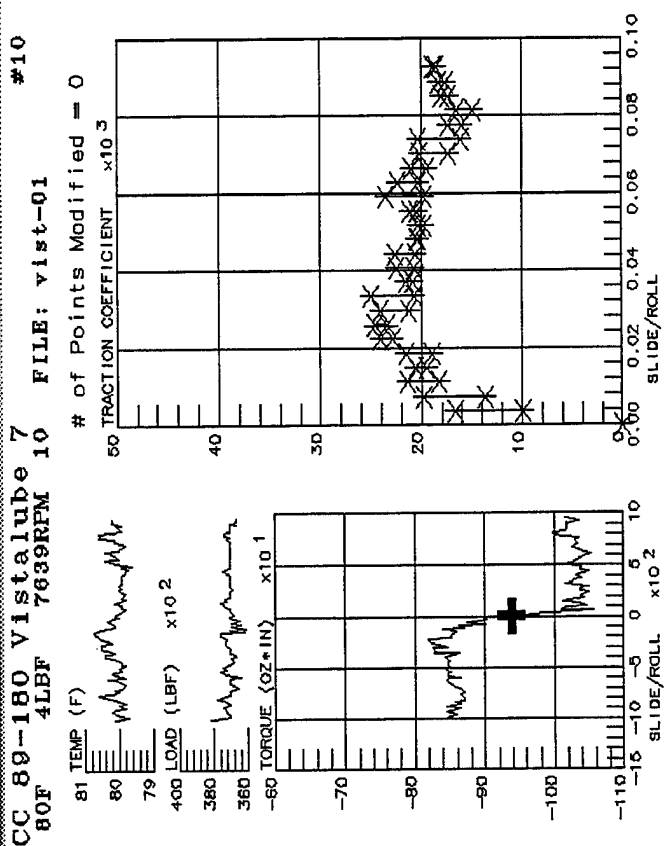
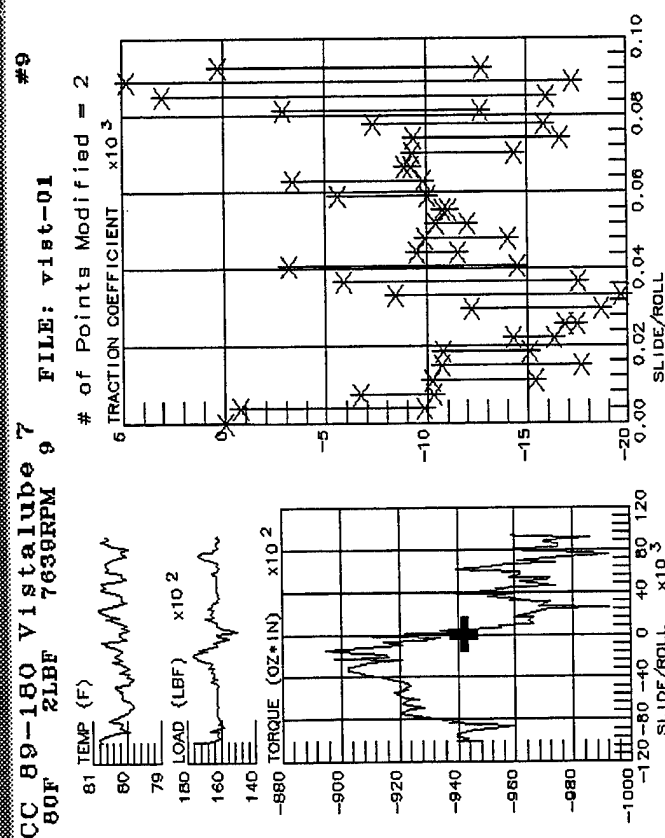
CC 89-180 Vistalube 7
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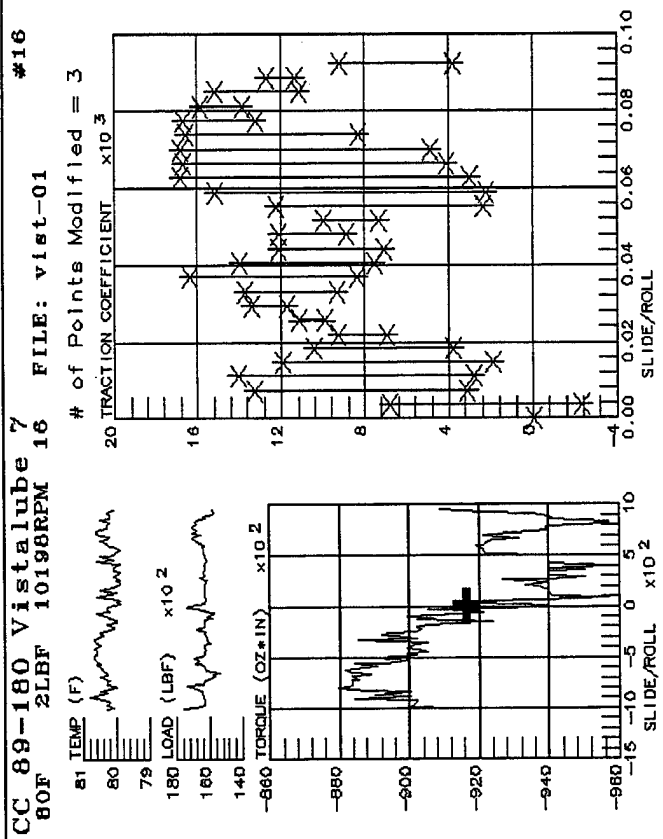
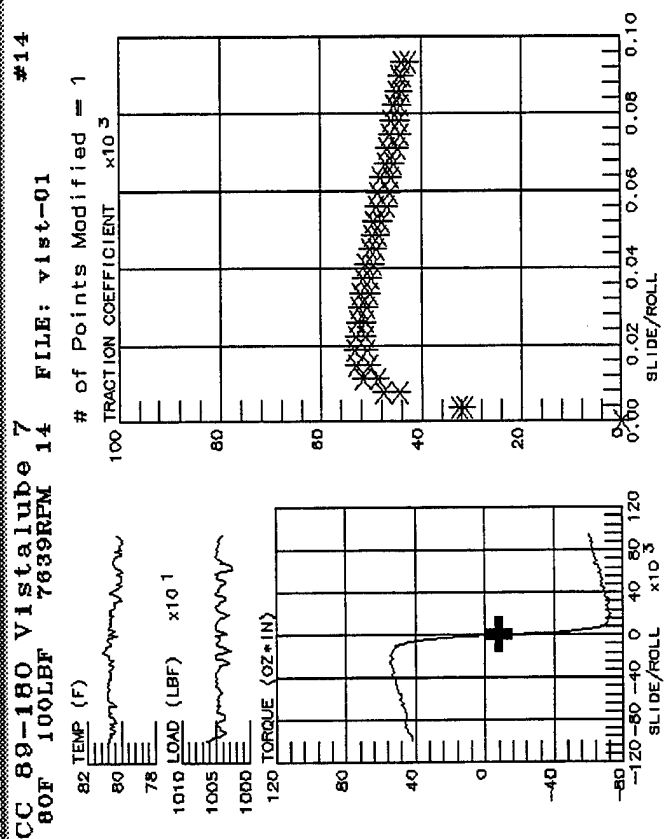
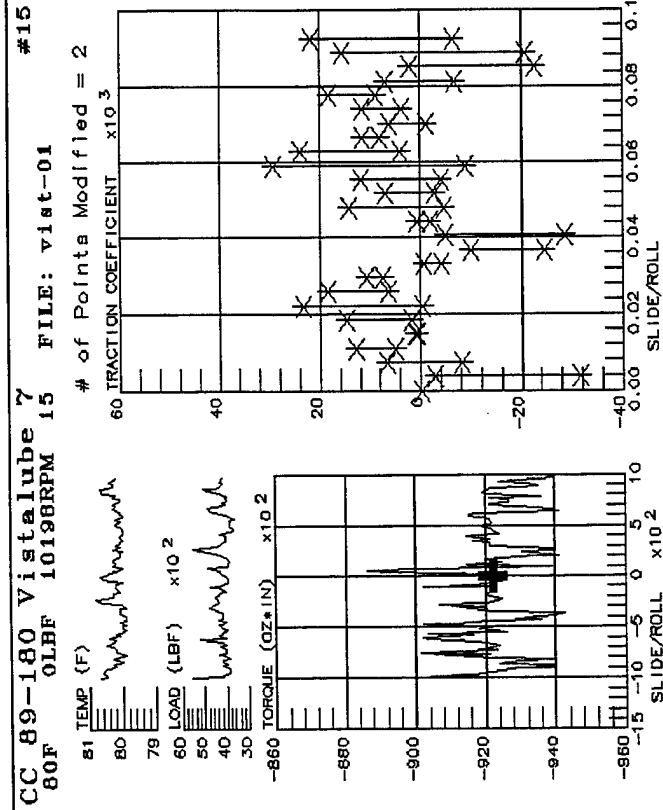
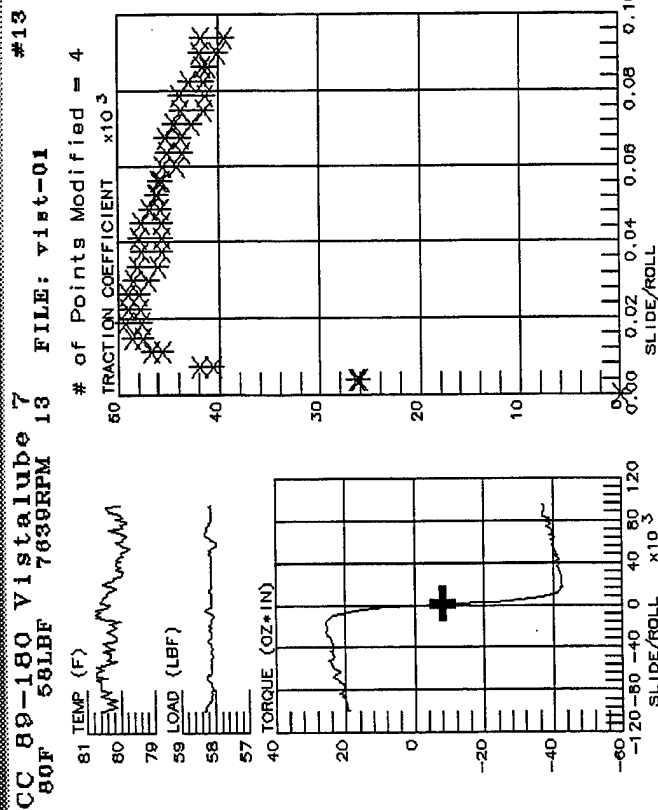


CC 89-180 Vistalube 7
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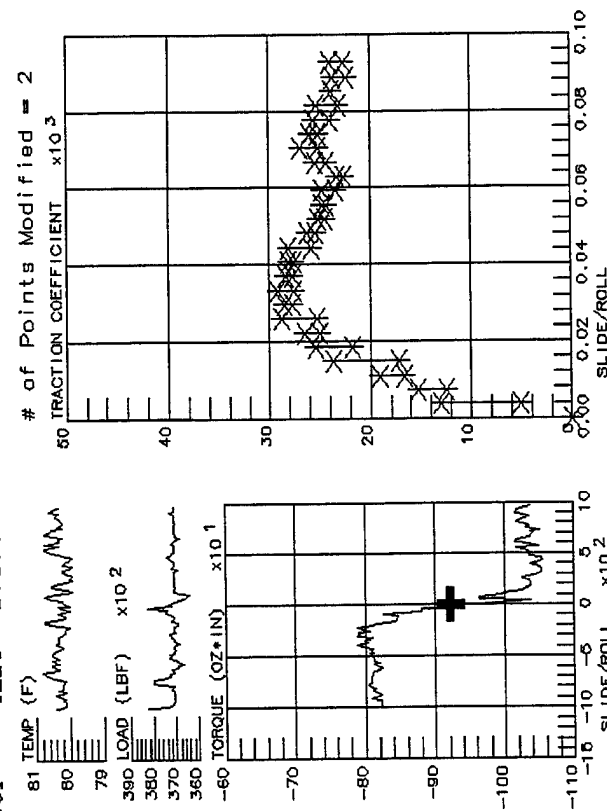
CC 89-180 Vistalube 7
80F 0LBF 7639RPM 8 FILE: v1st-01



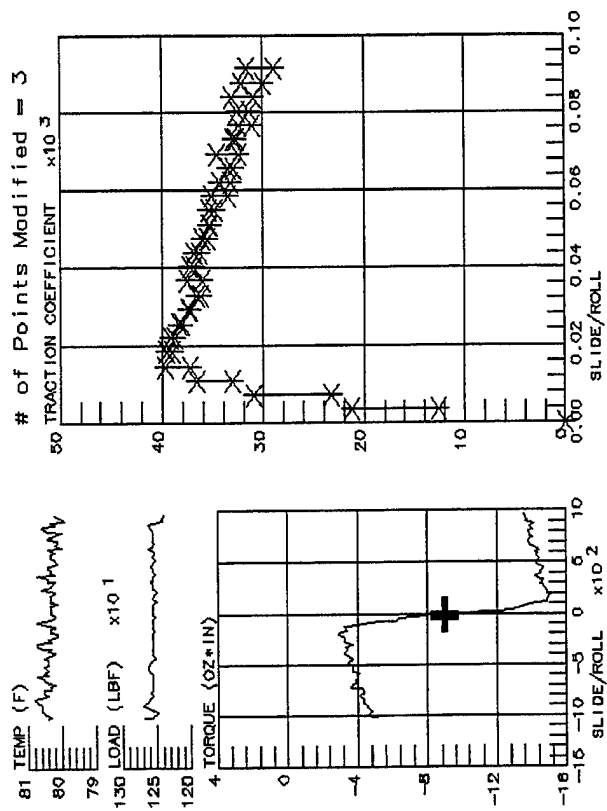




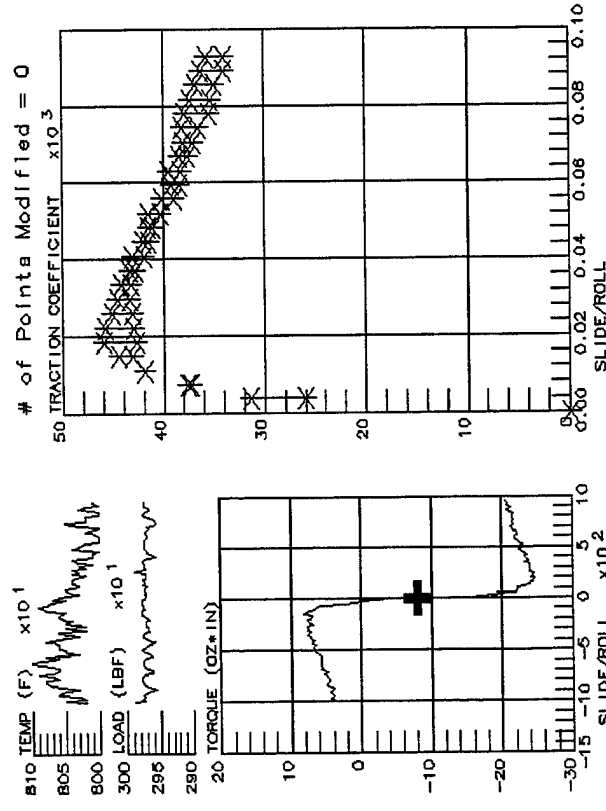
CC 89-180 Vistalube 7 #17
80F 4LBF 1019RPM 17 FILE: v1st-01



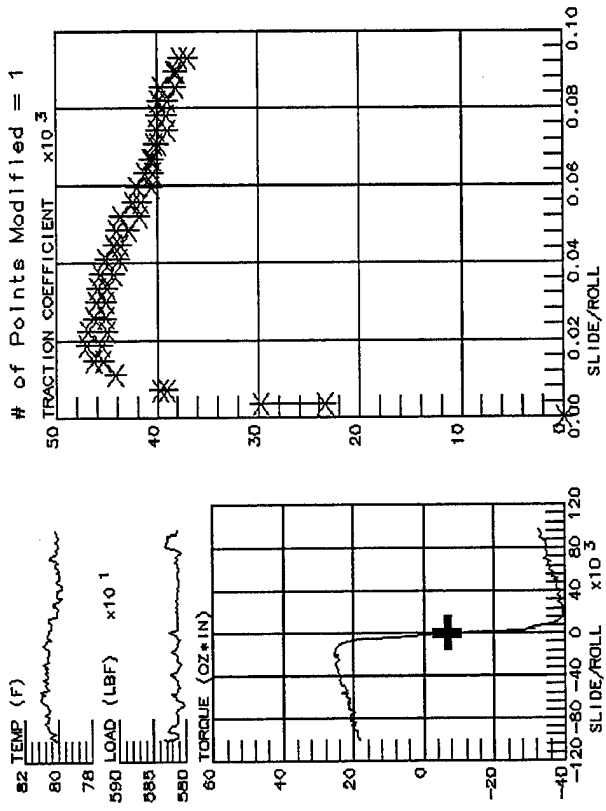
CC 89-180 Vistalube 7 #18
80F 13LBF 1019RPM 18 FILE: v1st-01



CC 89-180 Vistalube 7 #19
80F 30LBF 1019RPM 19 FILE: v1st-01



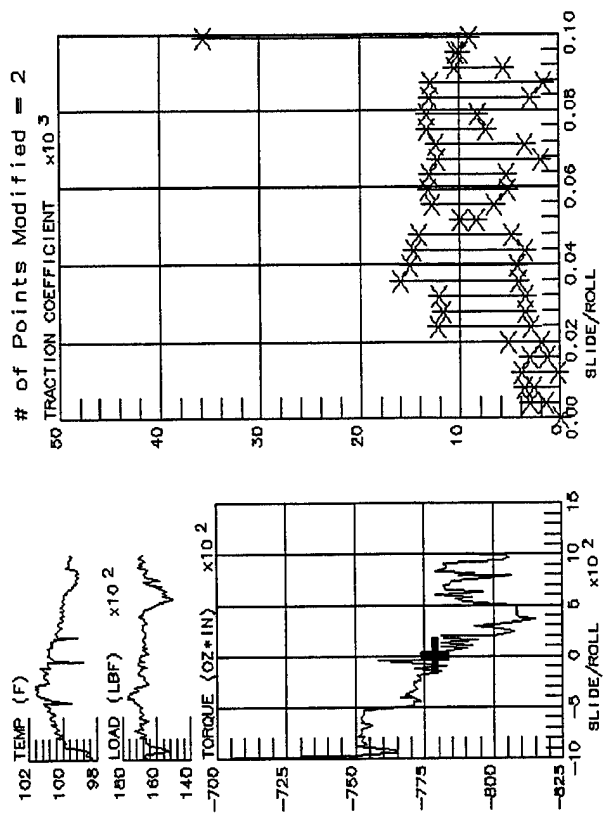
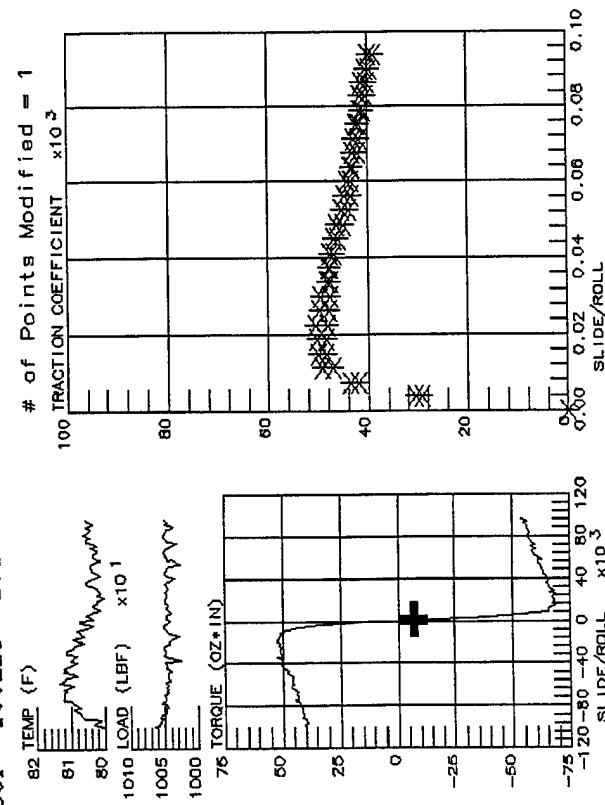
CC 89-180 Vistalube 7 #20
80F 58LBF 1019RPM 20 FILE: v1st-01



TRACTION MODELLING

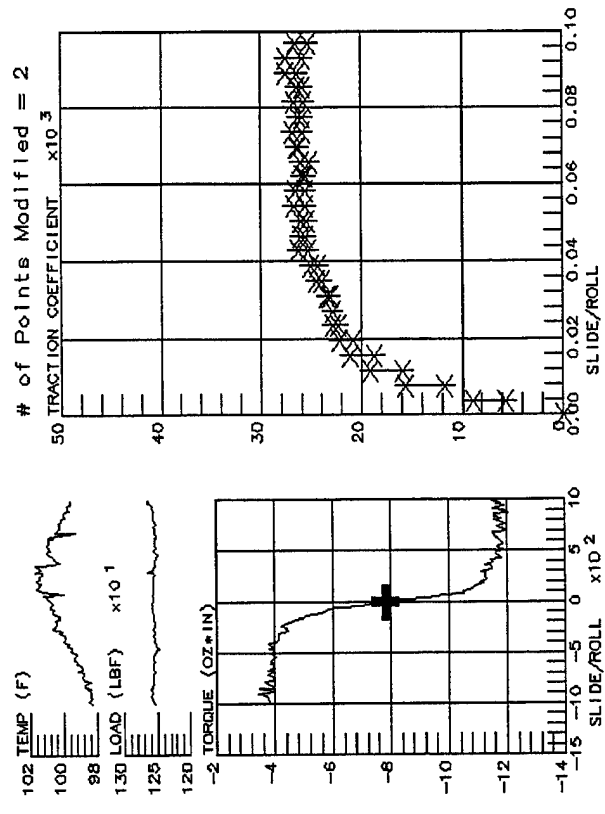
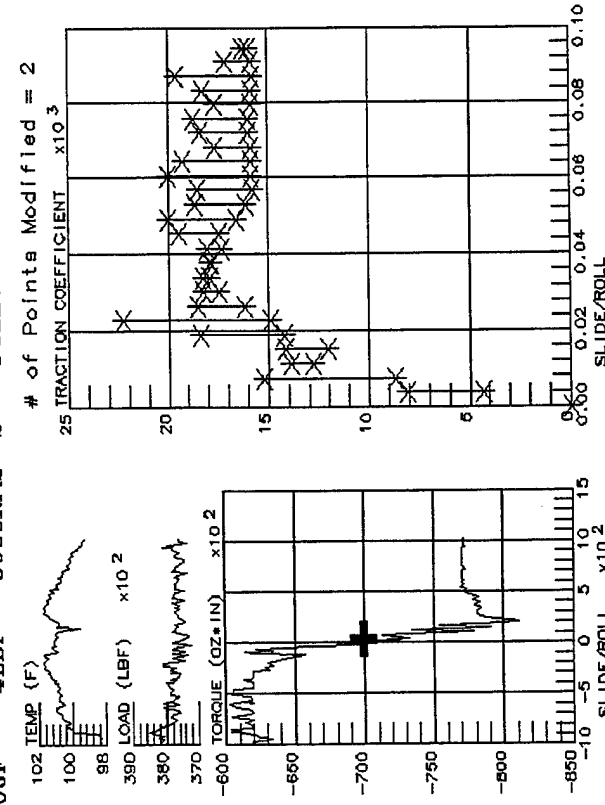
CC 89-180 Vistalube 7
80F 100LBF 10198RPM 21 FILE: v1st-01

CC 89-180 Vistalube 7
100F 2LBF 5080RPM 1 FILE: v1st-02

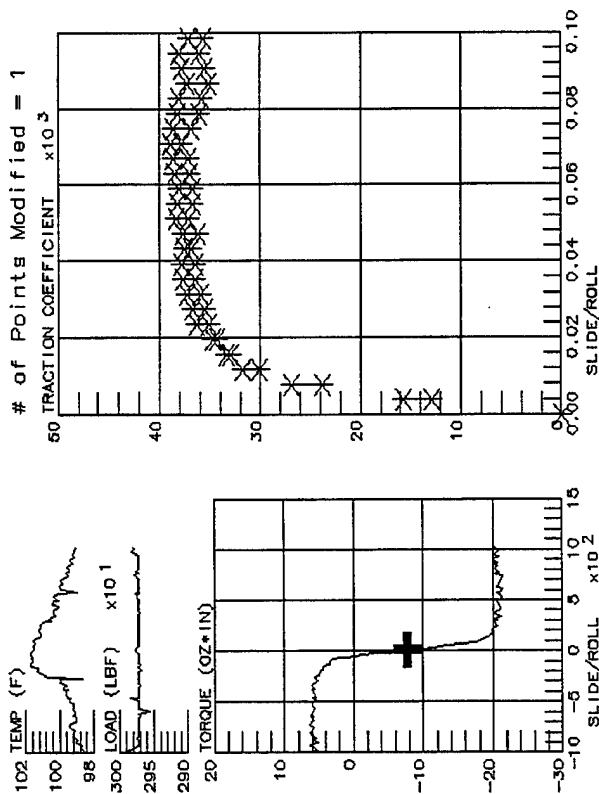


CC 89-180 Vistalube 7
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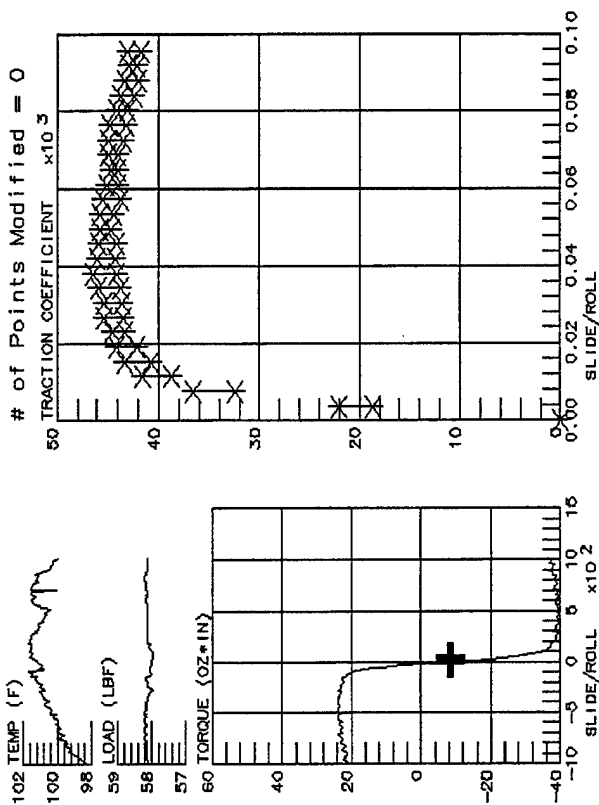
CC 89-180 Vistalube 7
100F 13LBF 5080RPM 3 FILE: v1st-02



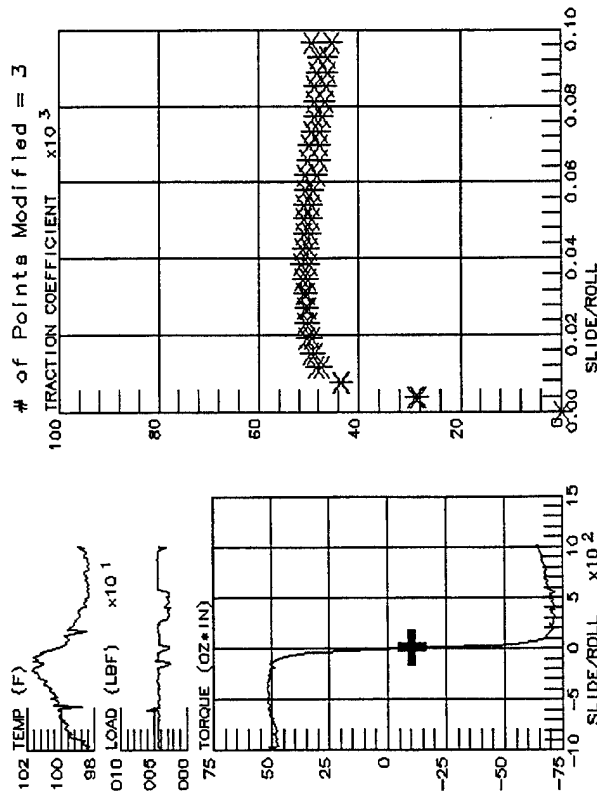
CC 89-180 Vistalube 7 #25
100F 30LBF 5080RPM 4 FILE: v1st-02



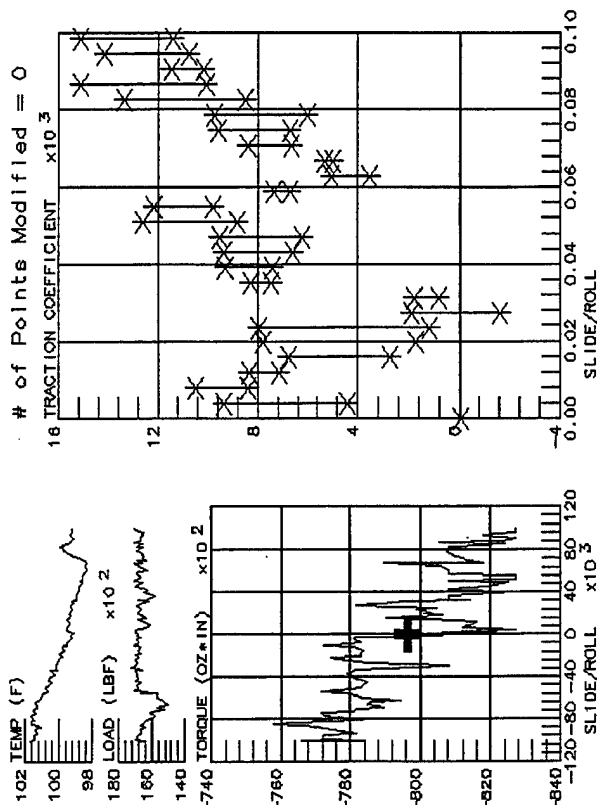
CC 89-180 Vistalube 7 #26
100F 68LBF 5080RPM 5 FILE: v1st-02



CC 89-180 Vistalube 7 #27
100F 100LBF 5080RPM 6 FILE: v1st-02

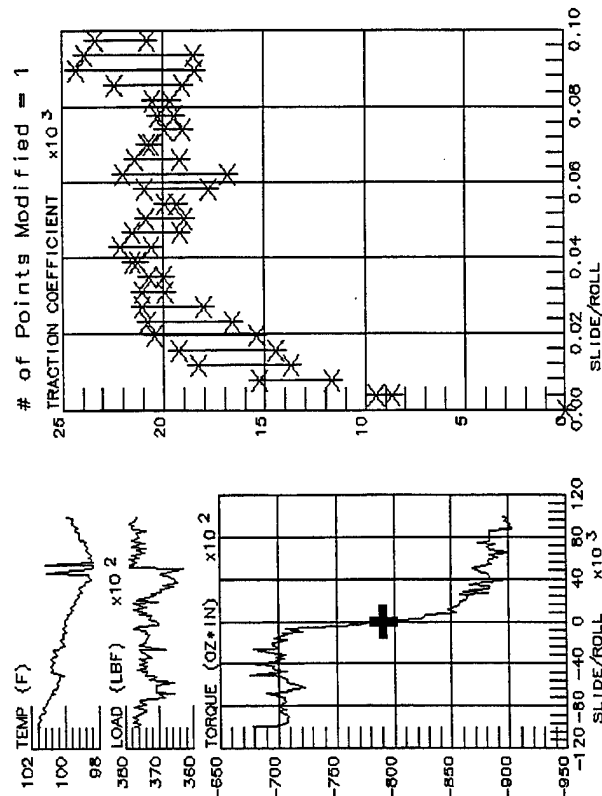


CC 89-180 Vistalube 7 #28
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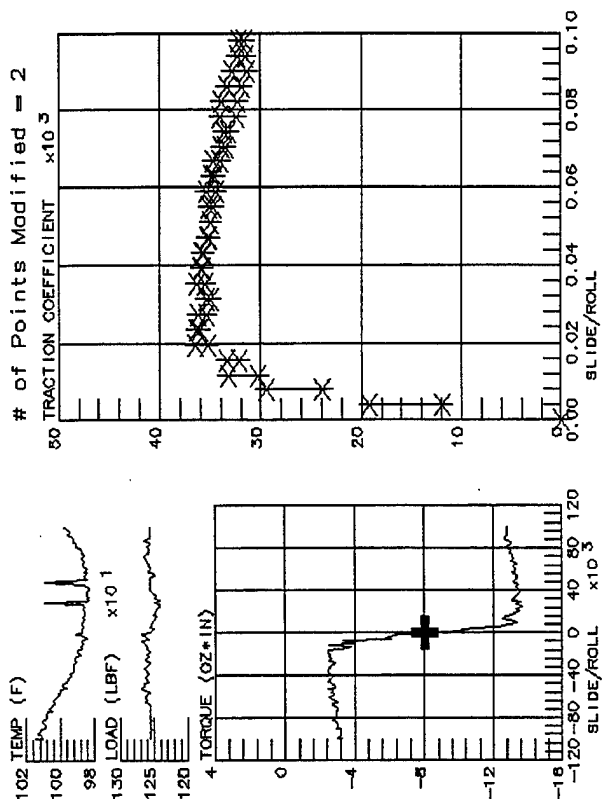
CC 89-180 Vistalube 7 #29
100F 4LBF 7639RPM 8 FILE: v1st-02

of Points Modified = 1



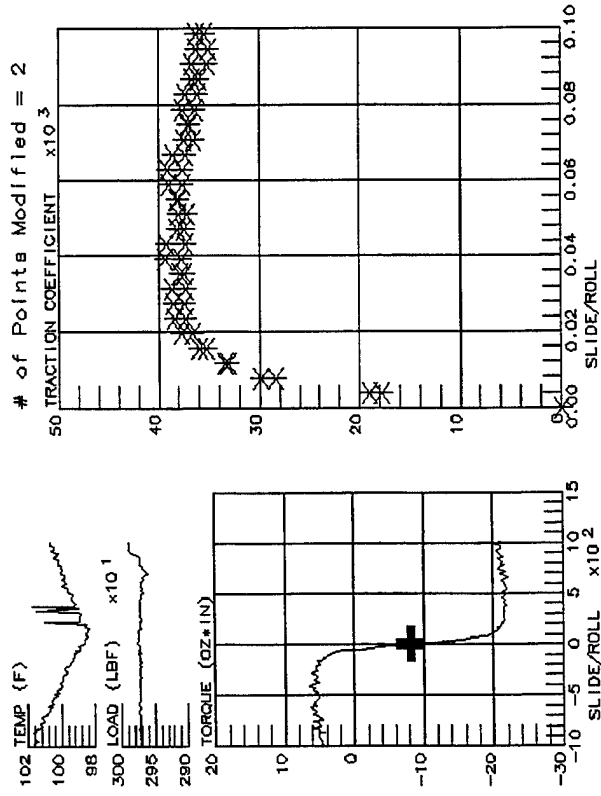
CC 89-180 Vistalube 7 #30
100F 13LBF 7639RPM 9 FILE: v1st-02

of Points Modified = 2



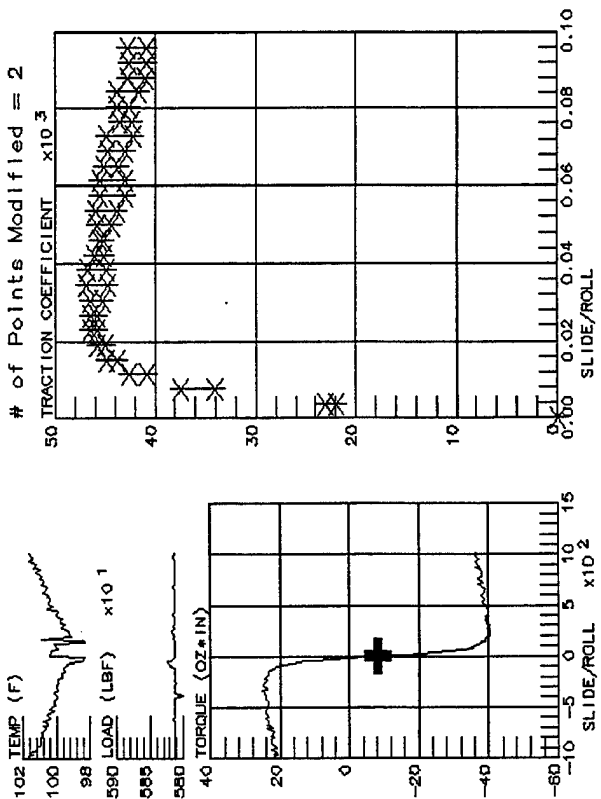
CC 89-180 Vistalube 7 #31
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of Points Modified = 2



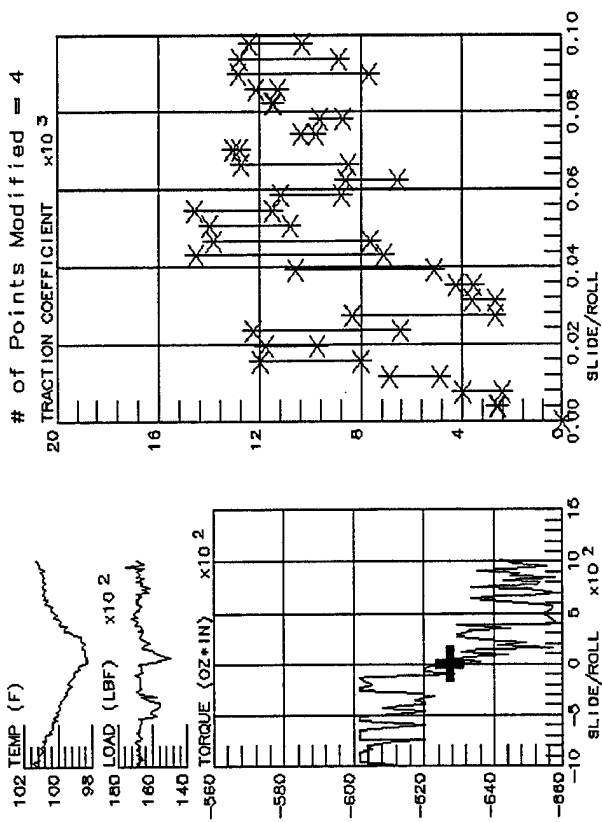
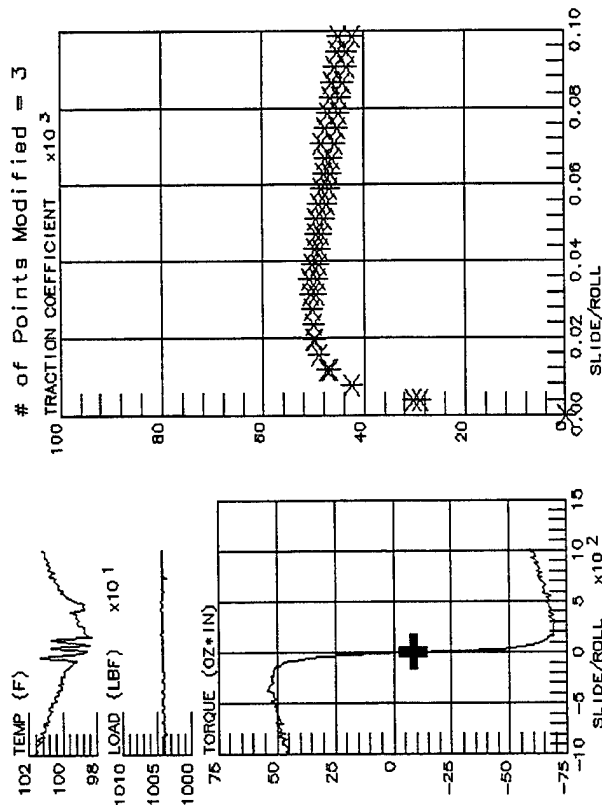
CC 89-180 Vistalube 7 #32
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of Points Modified = 2



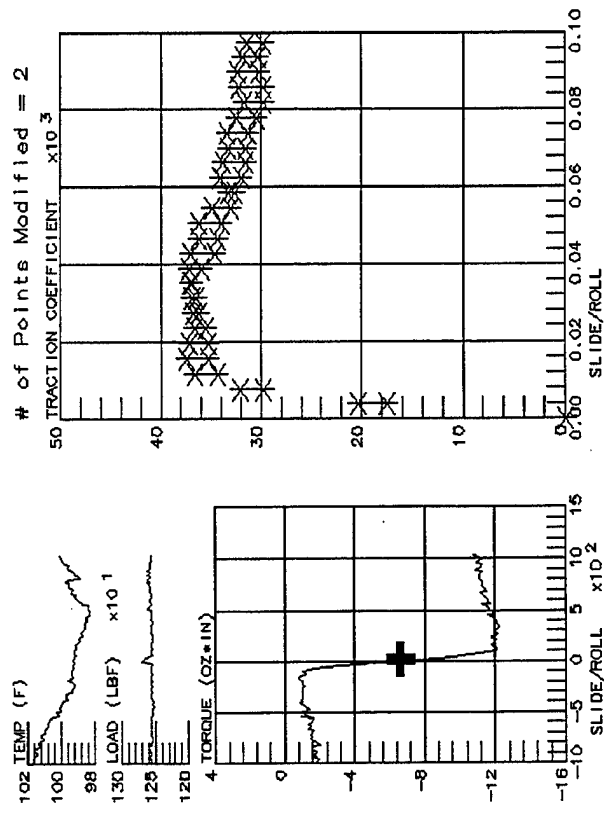
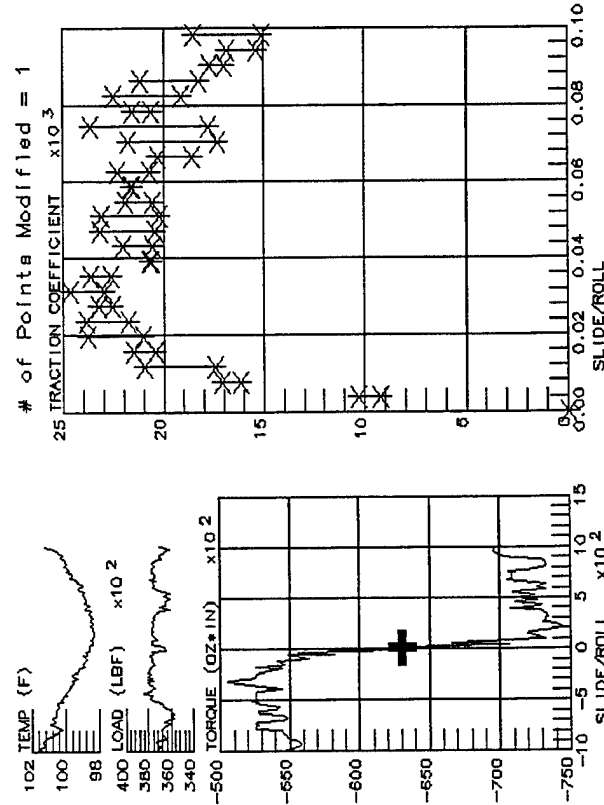
CC 89-180 Vistalube 7
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CC 89-180 Vistalube 7
100F 2LBF 10198RPM 13 FILE: v1st-02



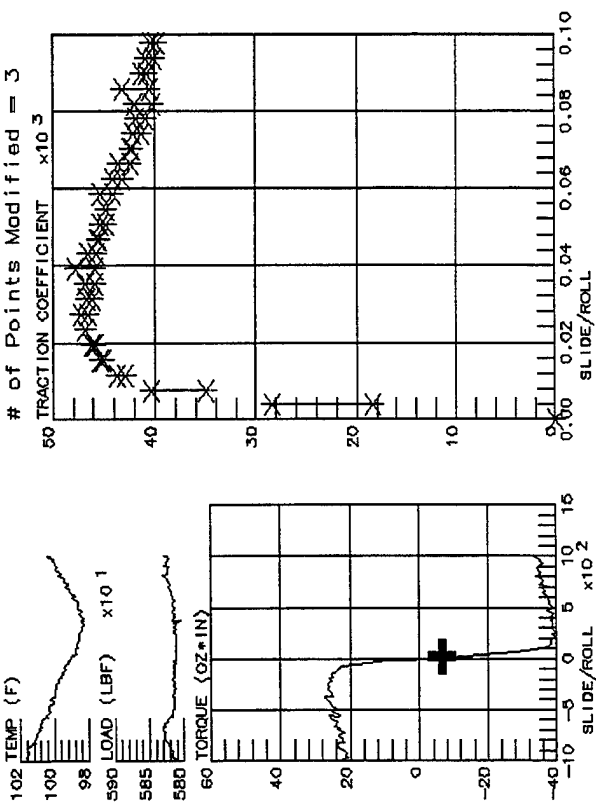
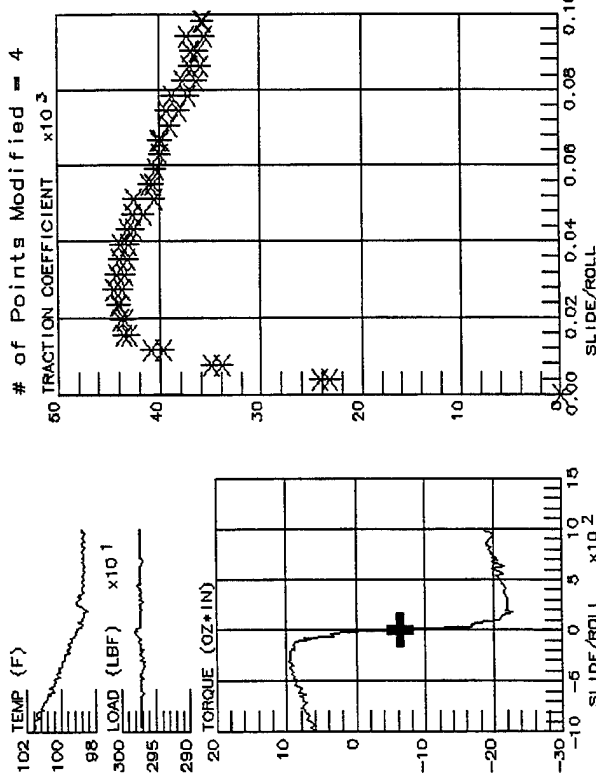
CC 89-180 Vistalube 7
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CC 89-180 Vistalube 7
100F 13LBF 10198RPM 15 FILE: v1st-02



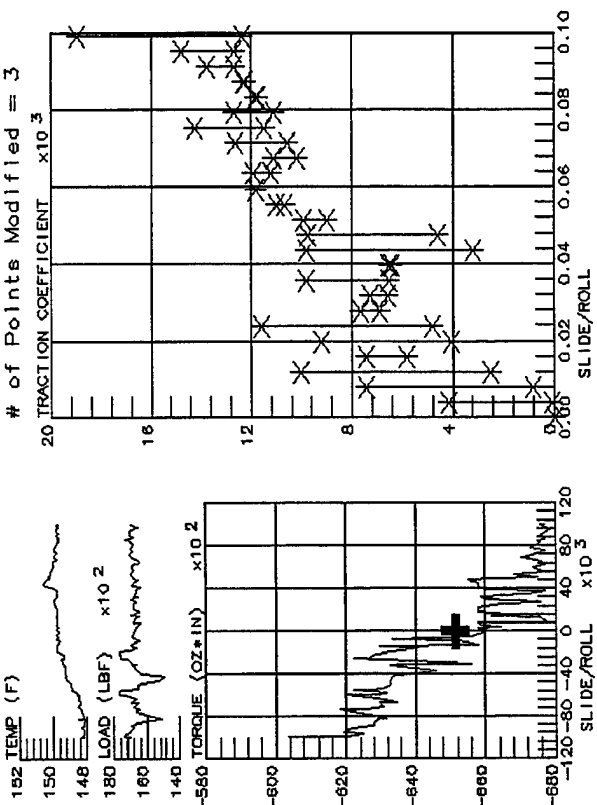
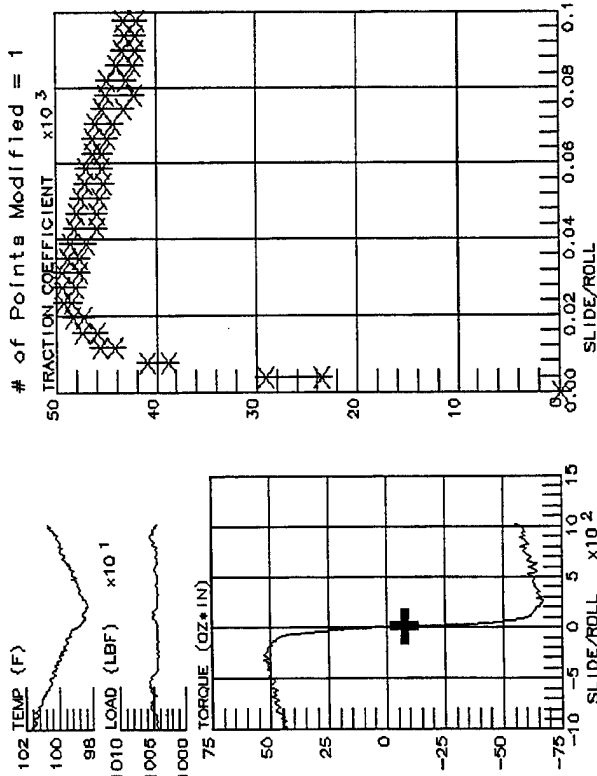
CC 89-180 Vistalube 7
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CC 89-180 Vistalube 7
100F 58LBF 10198RPM 17 FILE: v1st-02

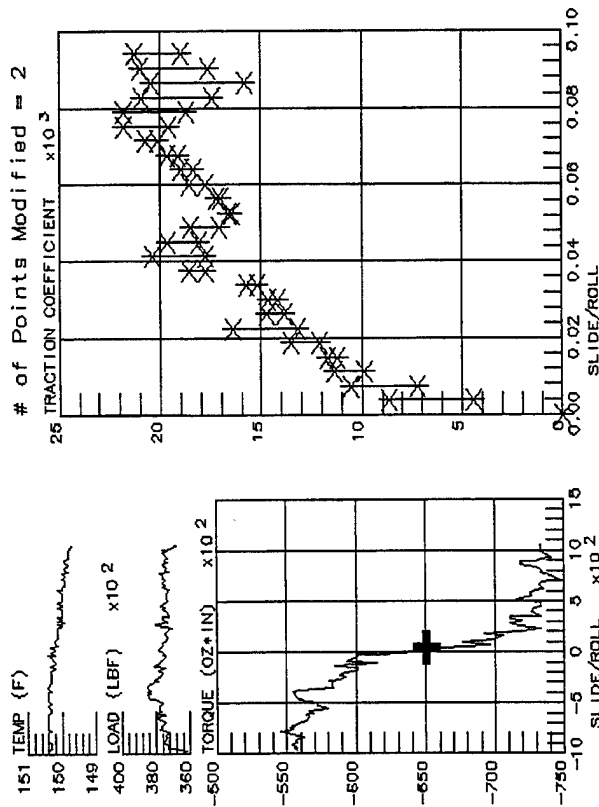


CC 89-180 Vistalube 7
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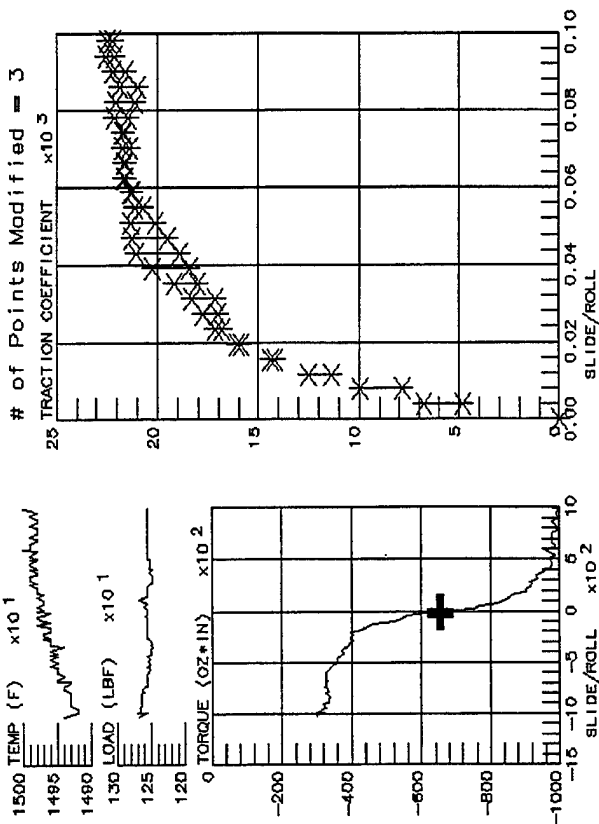
CC 89-180 Vistalube 7
150F 2LBF 5080RPM 1 FILE: v1st-03



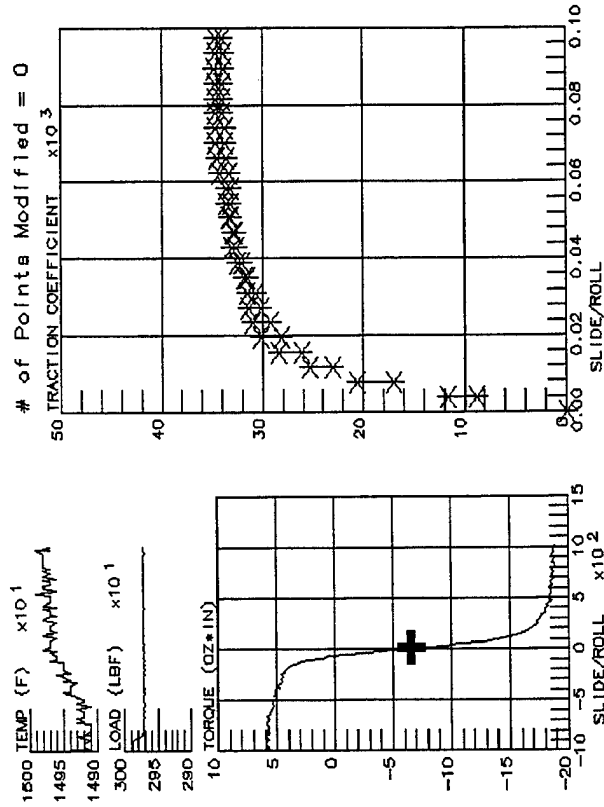
CC 89-180 Vistalube 7 #41
150F 4LBF 5080RPM 2 FILE: v1st-03



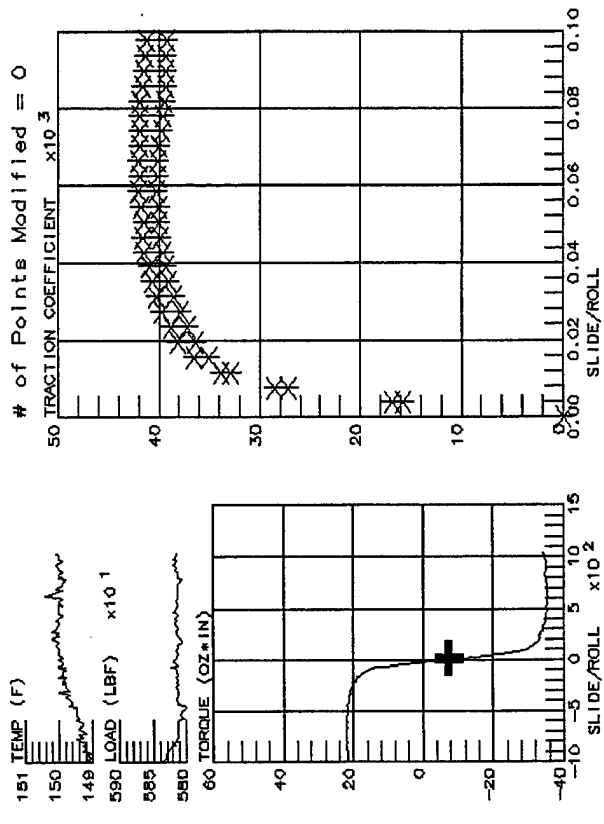
CC 89-180 Vistalube 7 #42
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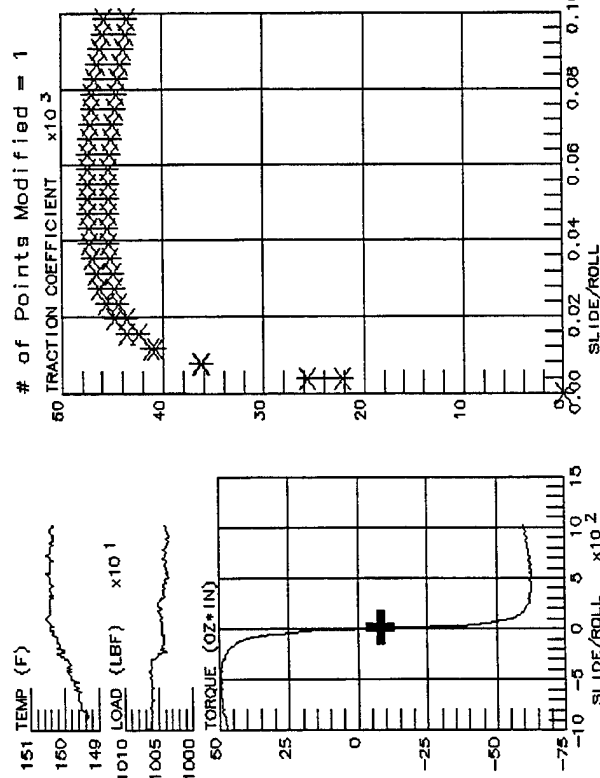
CC 89-180 Vistalube 7 #43
150F 30LBF 5080RPM 4 FILE: v1st-03



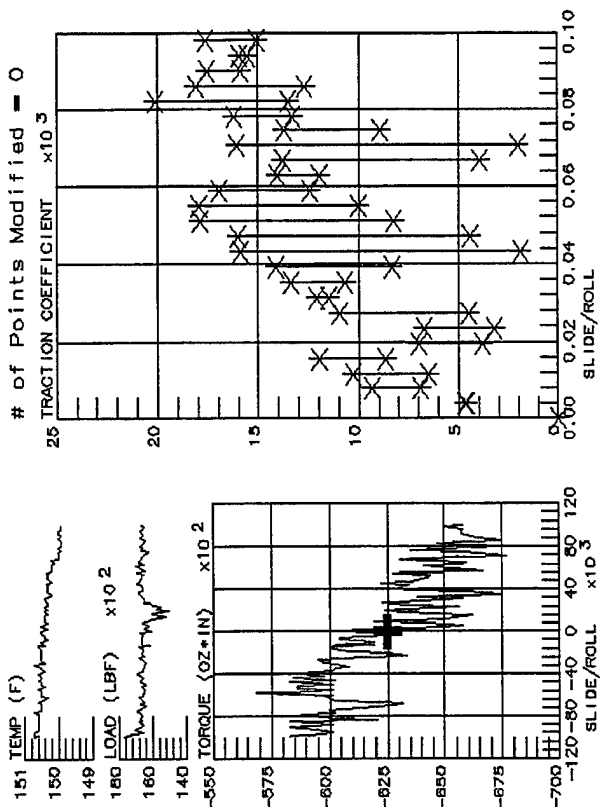
CC 89-180 Vistalube 7 #44
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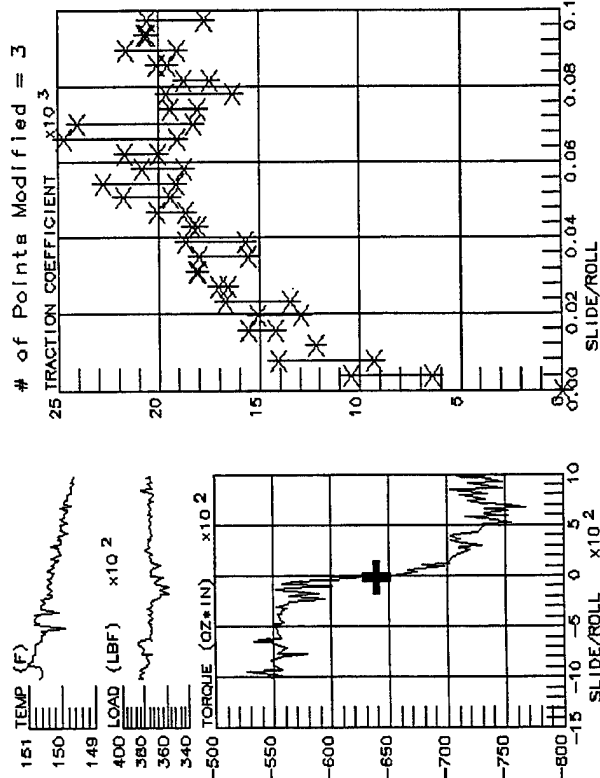
CC 89-180 Vistalube 7 #45
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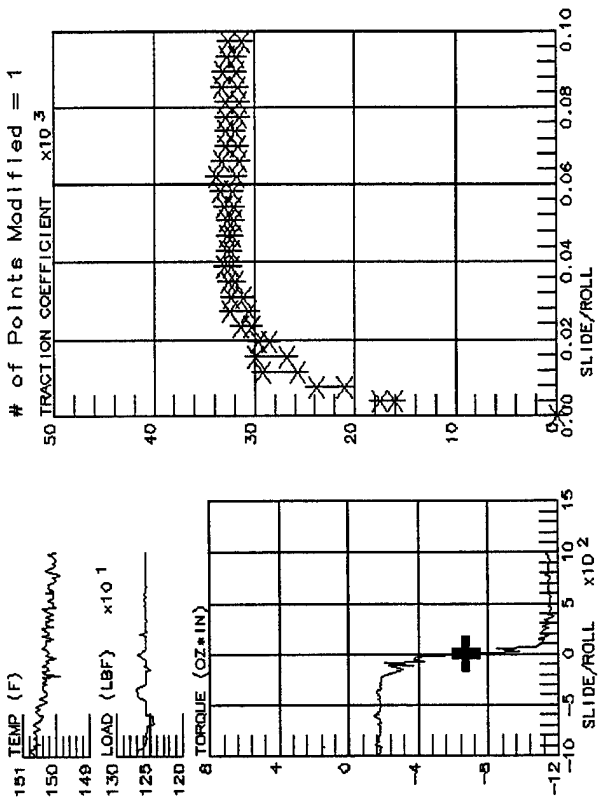
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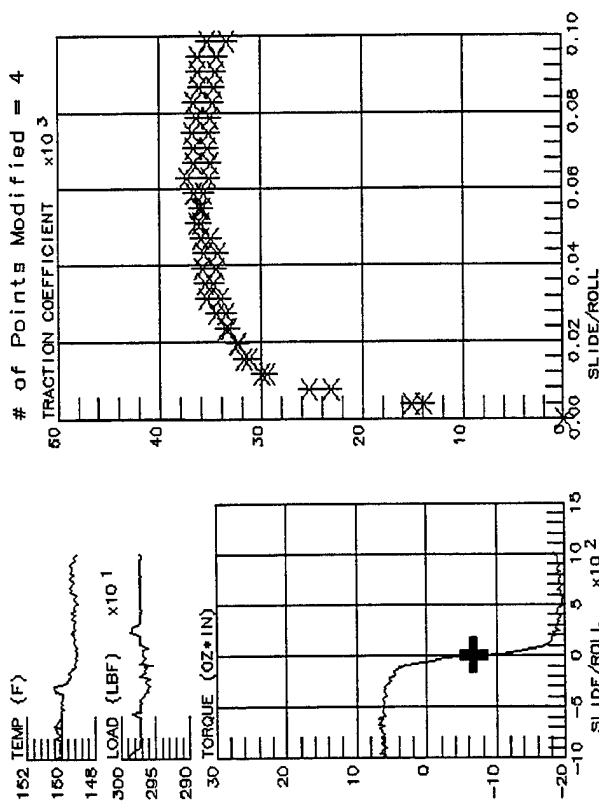
CC 89-180 Vistalube 7 #47
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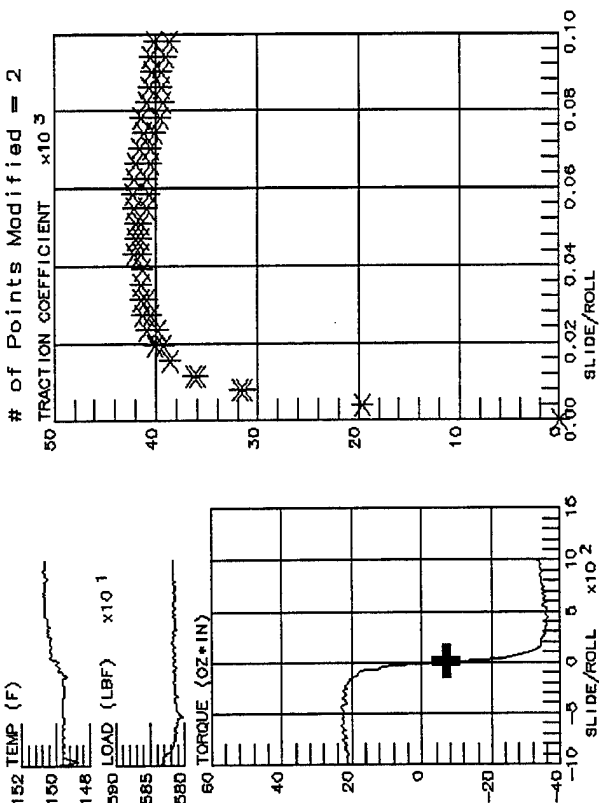
CC 89-180 Vistalube 7 #48
150F 13LBF 7639RPM 9 FILE: v1st-03



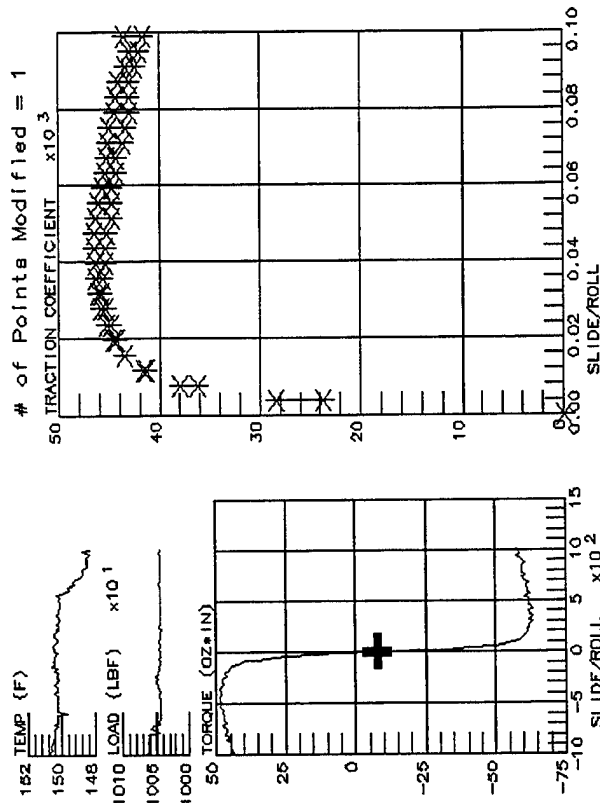
CC 89-180 Vistalube 7 #49
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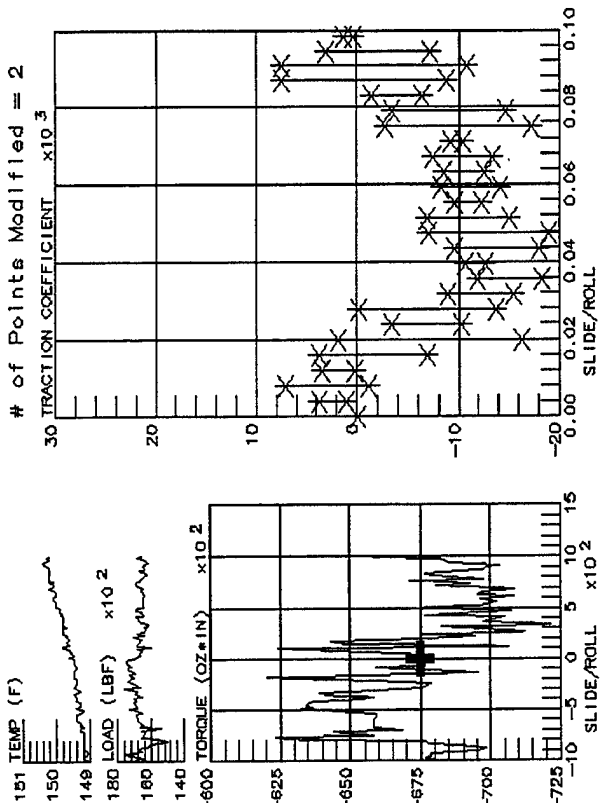
CC 89-180 Vistalube 7 #50
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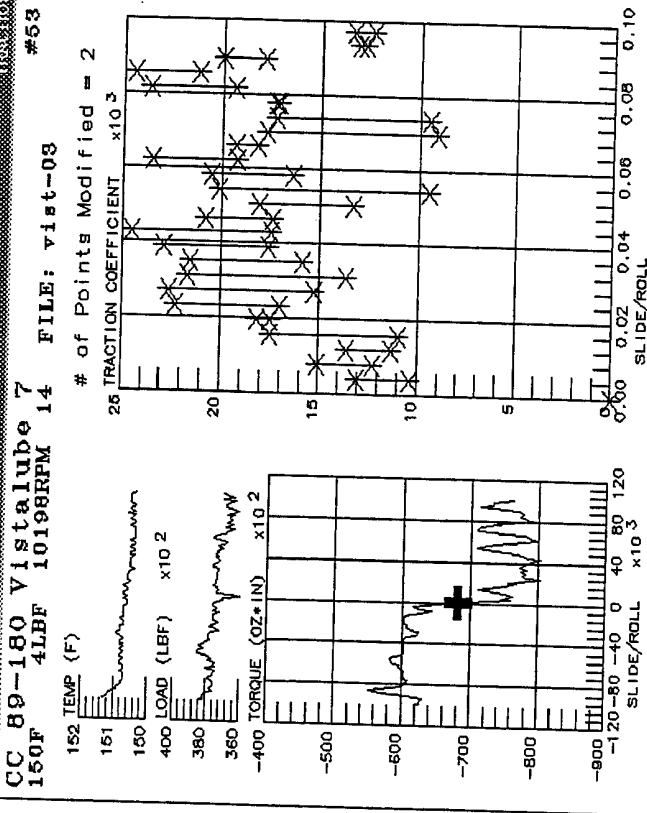


CC 89-180 Vistalube 7 #51
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CC 89-180 Vistalube 7 #52
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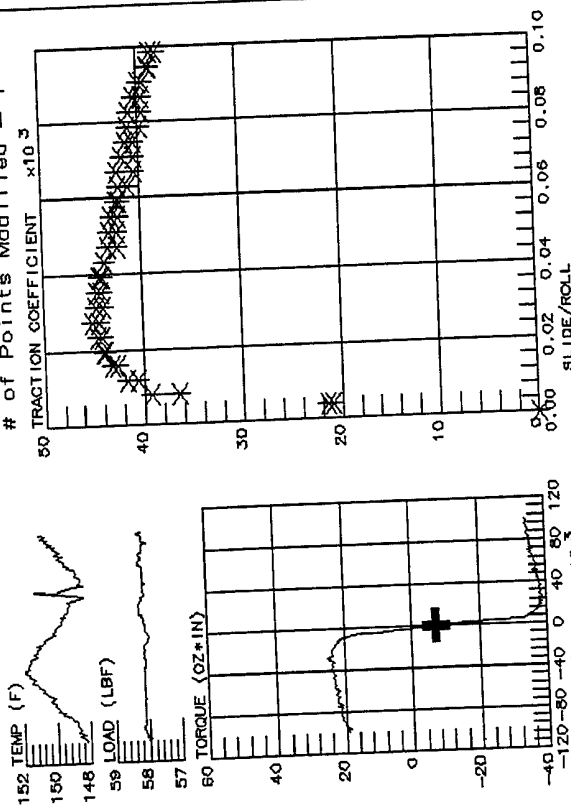




CC 89-180 Vistalube 7
160F 58LBF 1019RPM 1

FILE: v1st-03z

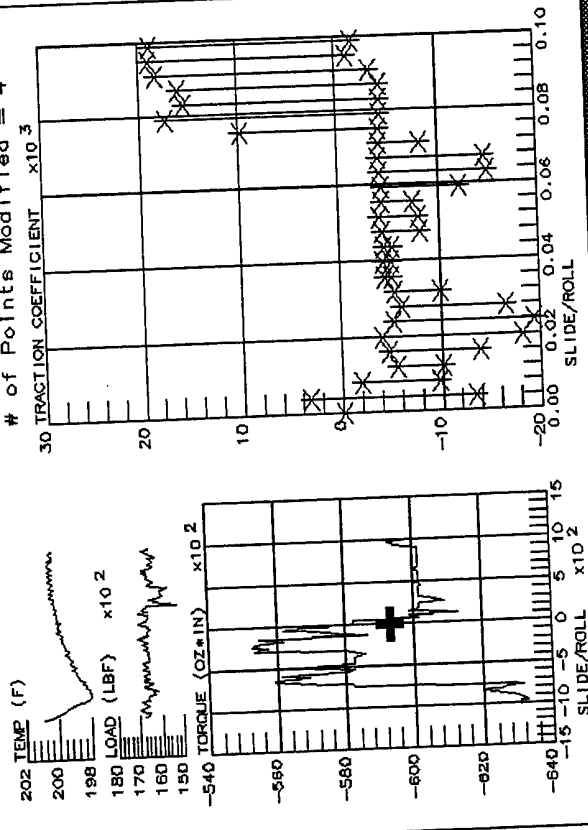
of Points Modified = 1



CC 89-180 Vistalube 7
200F 2LBF 5080RPM 1

FILE: v1st-04

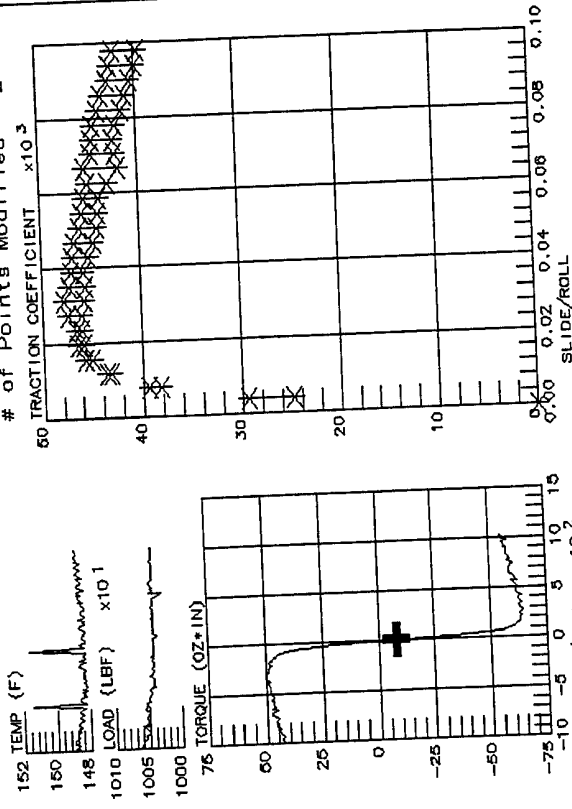
of Points Modified = 4



CC 89-180 Vistalube 7
150F 100LBF 1019RPM 2

FILE: v1st-03z

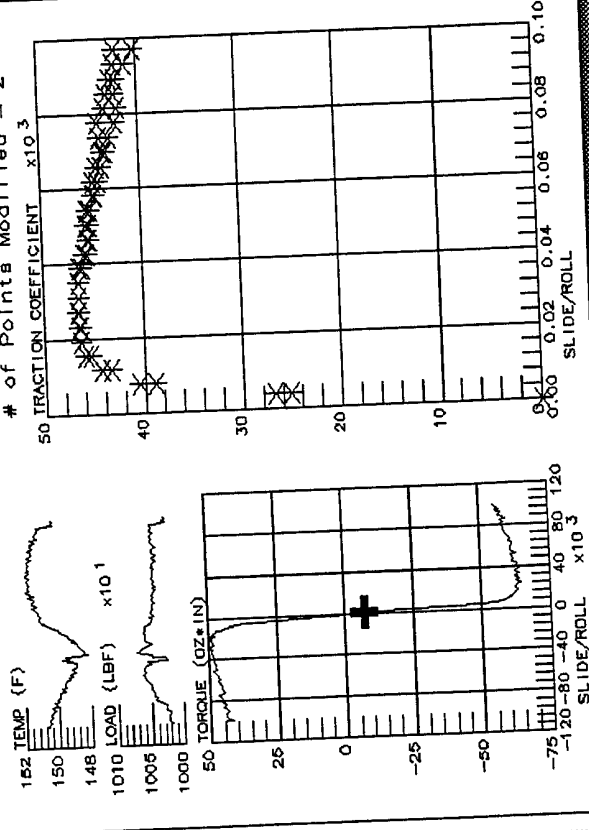
of Points Modified = 2



CC 89-180 Vistalube 7
150F 100LBF 1019RPM 2

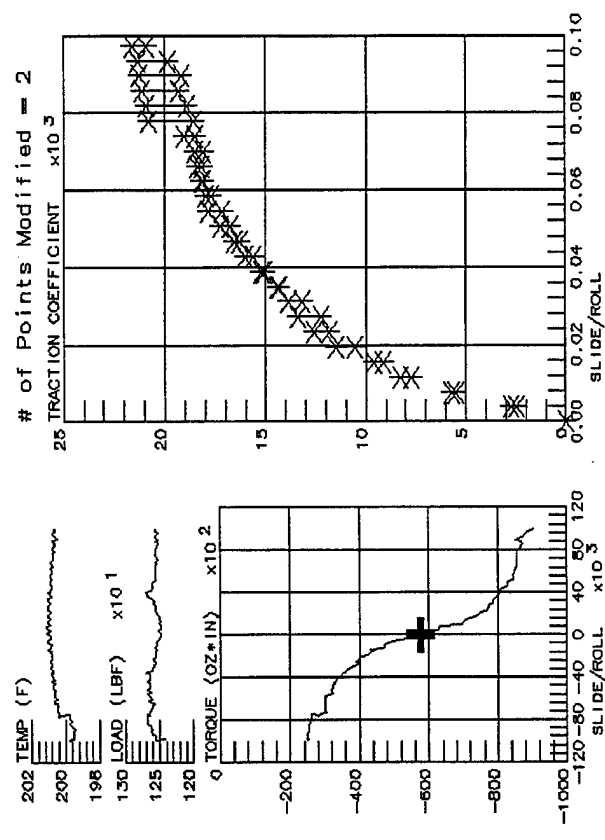
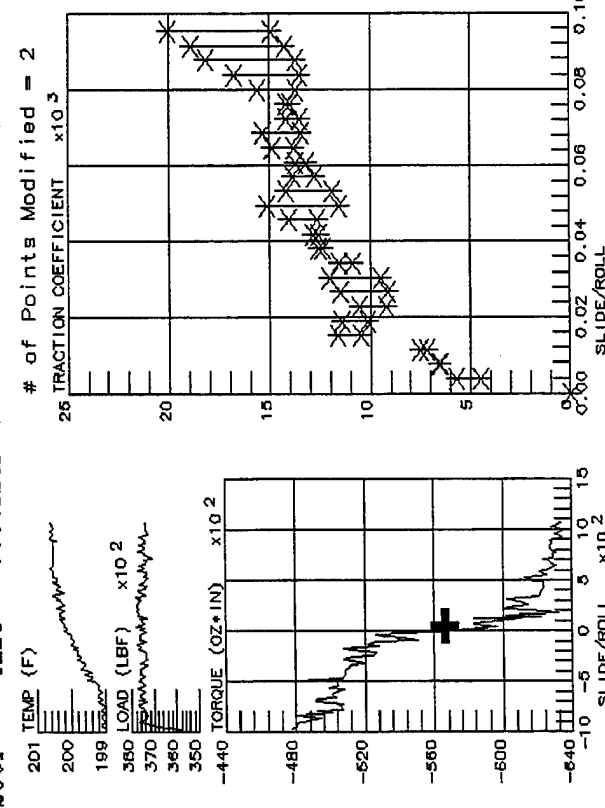
FILE: v1st-03z

of Points Modified = 2



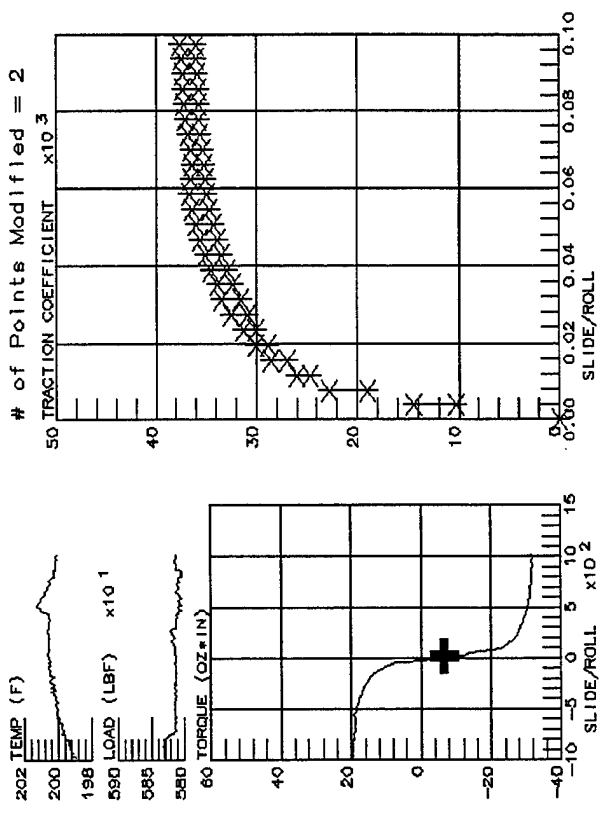
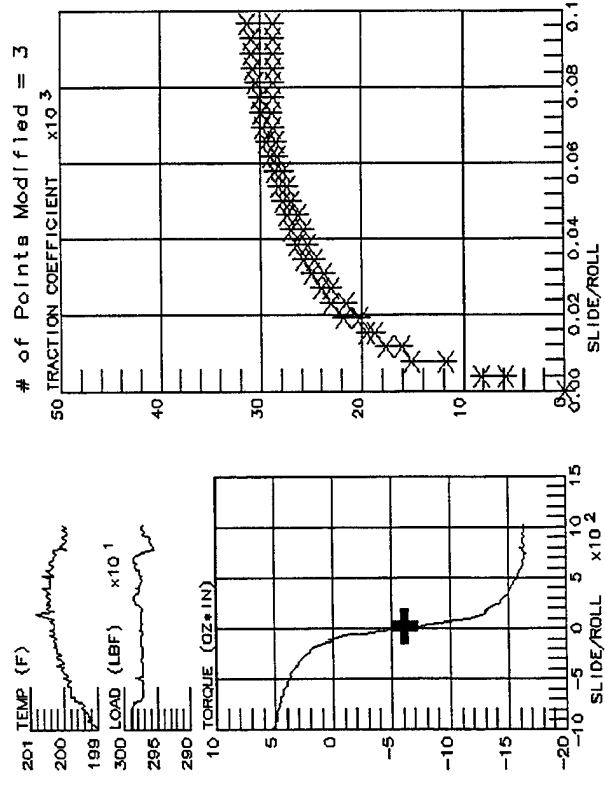
CC 89-180 Vistalube 7
200F 4LBF 5080RPM 2 FILE: v1st-04

CC 89-180 Vistalube 7
200F 13LBF 5080RPM 3 FILE: v1st-04

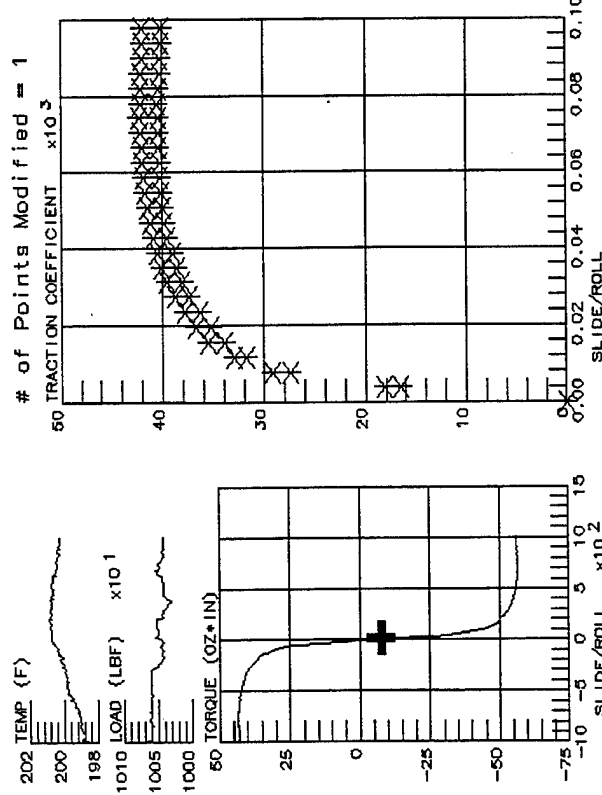


CC 89-180 Vistalube 7
200F 30LBF 5080RPM 4 FILE: v1st-04

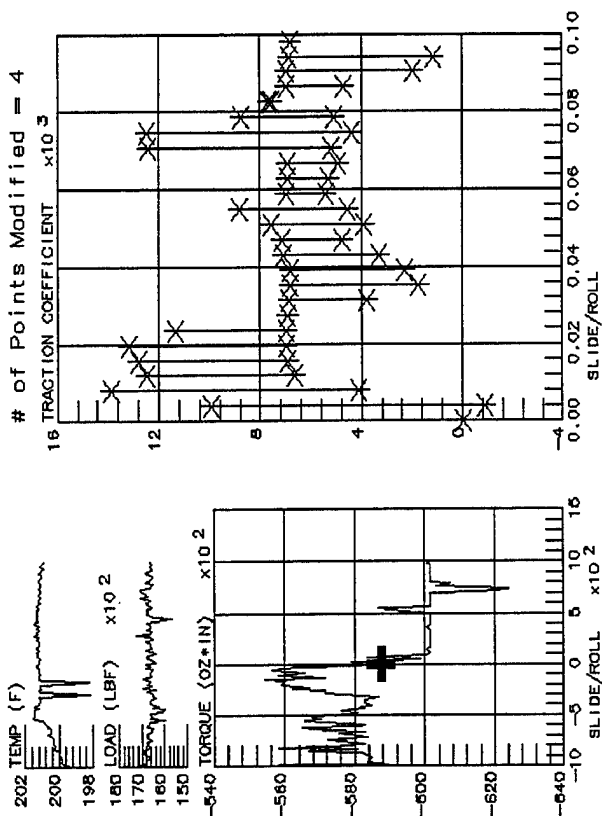
CC 89-180 Vistalube 7
200F 58LBF 5080RPM 5 FILE: v1st-04



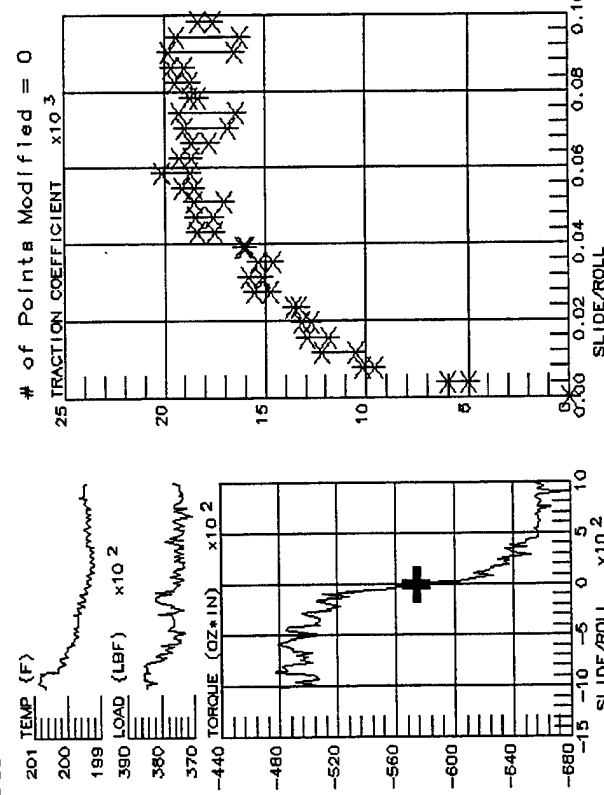
CC 89-180 Vistalube 7 #65
200F 100LBF 5080RPM 8 FILE: v1st-04



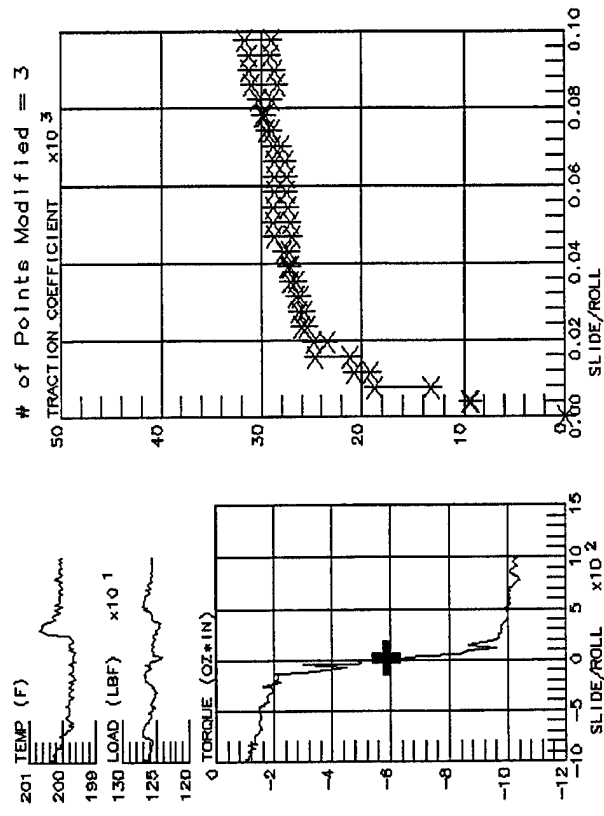
CC 89-180 Vistalube 7 #66
200F 2LBF 7639RPM 7 FILE: v1st-04



CC 89-180 Vistalube 7 #67
200F 4LBF 7639RPM 8 FILE: v1st-04

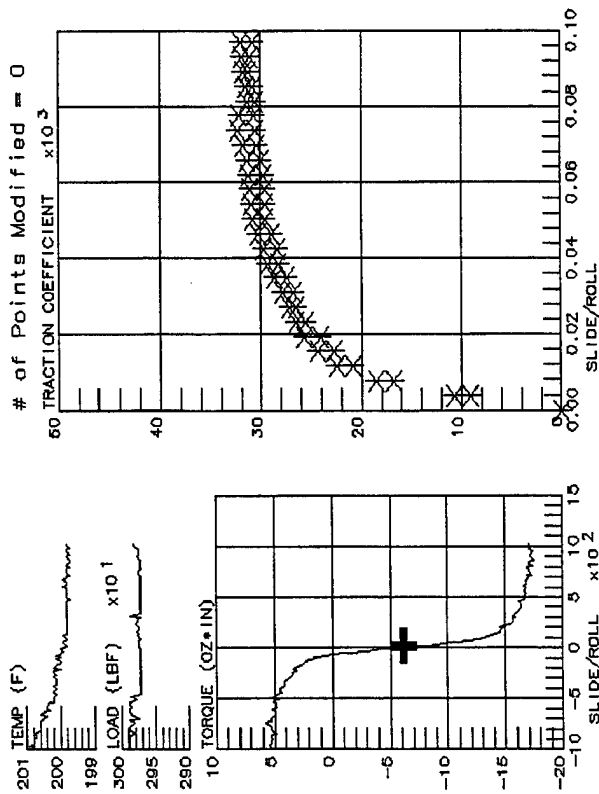


CC 89-180 Vistalube 7 #68
200F 13LBF 7639RPM 9 FILE: v1st-04



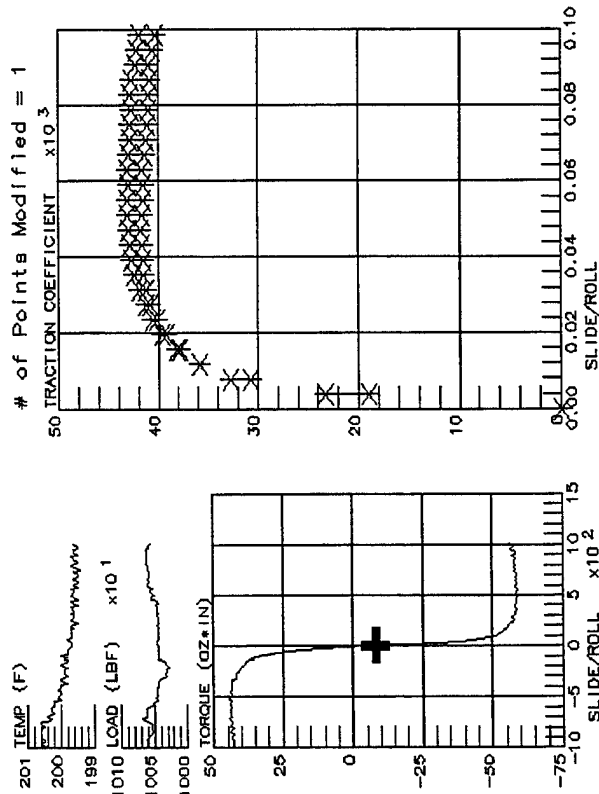
CC 89-180 Vistalube 7
200F 30LBF 7639RPM 10 FILE: v1st-04

#69
of Points Modified = 0



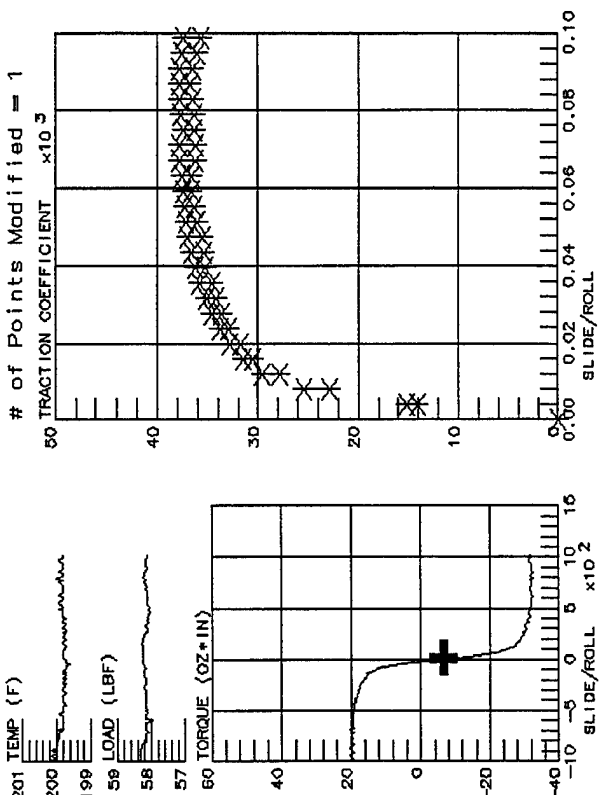
CC 89-180 Vistalube 7
200F 100LBF 7639RPM 12 FILE: v1st-04

#71
of Points Modified = 1



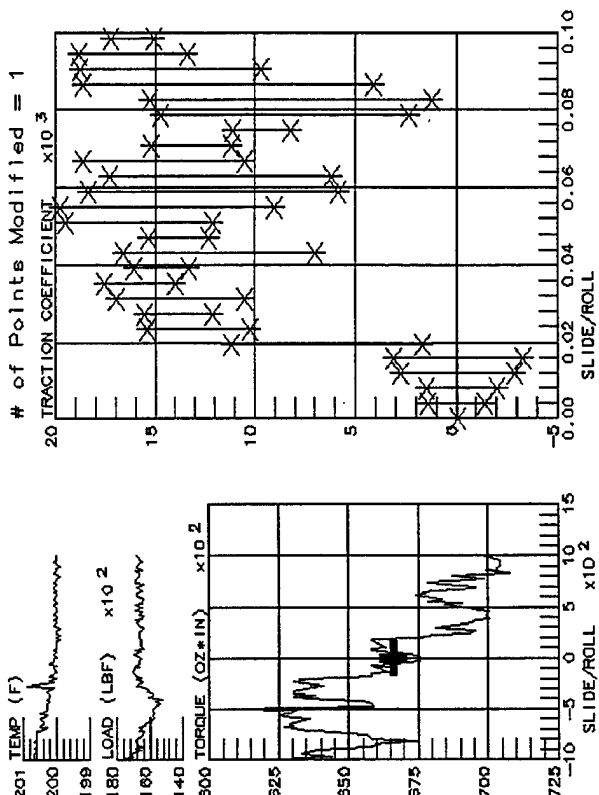
CC 89-180 Vistalube 7
200F 58LBF 7639RPM 11 FILE: v1st-04

#70
of Points Modified = 1



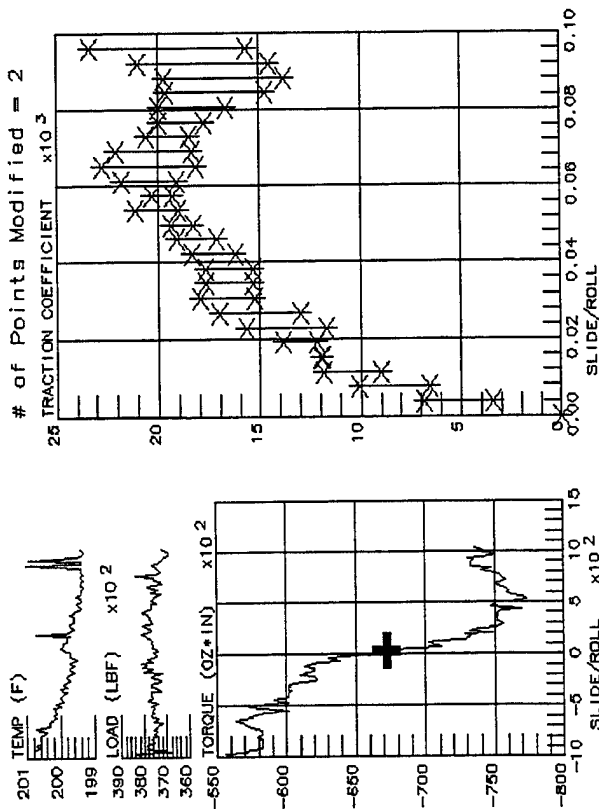
CC 89-180 Vistalube 7
200F 2LBF 10198RPM 13 FILE: v1st-04

#72
of Points Modified = 1



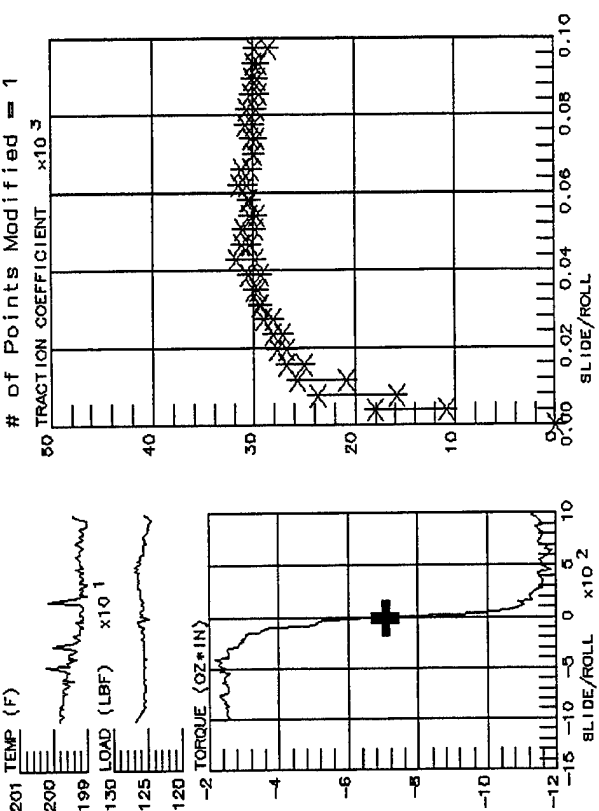
CC 89-180 Vistalube 7
200F 4LBF 10198RPM 14 FILE: v1st-04

#73
of Points Modified = 2



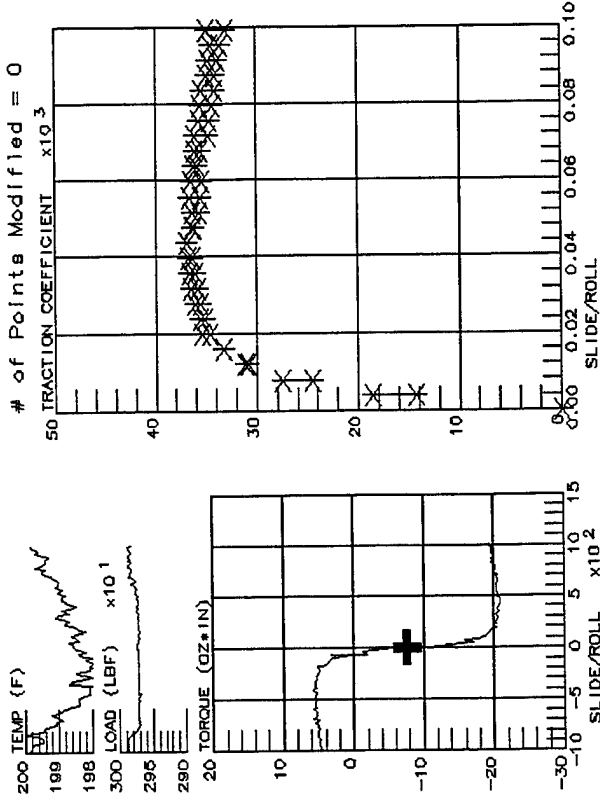
CC 89-180 Vistalube 7
200F 13LBF 10198RPM 15 FILE: v1st-04

#74
of Points Modified = 1



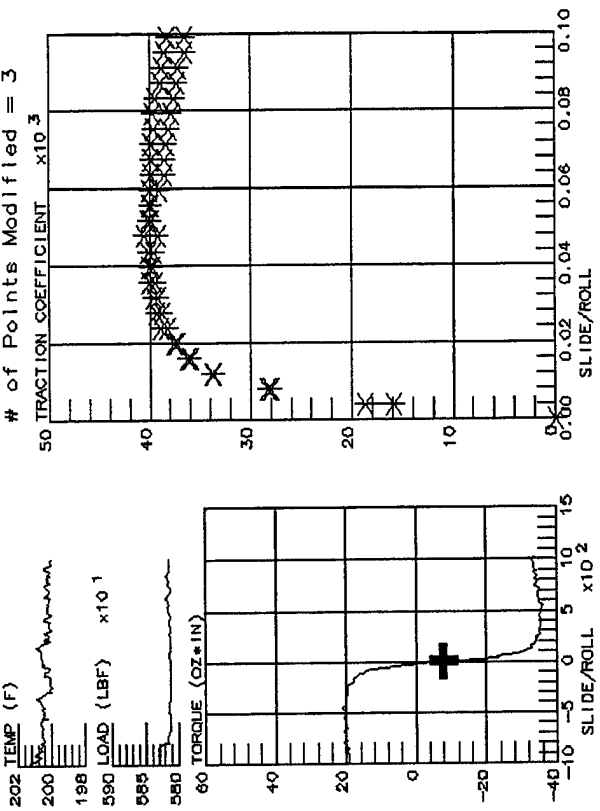
CC 89-180 Vistalube 7
200F 30LBF 10198RPM 16 FILE: v1st-04

#75
of Points Modified = 0



CC 89-180 Vistalube 7
200F 58LBF 10198RPM 17 FILE: v1st-04

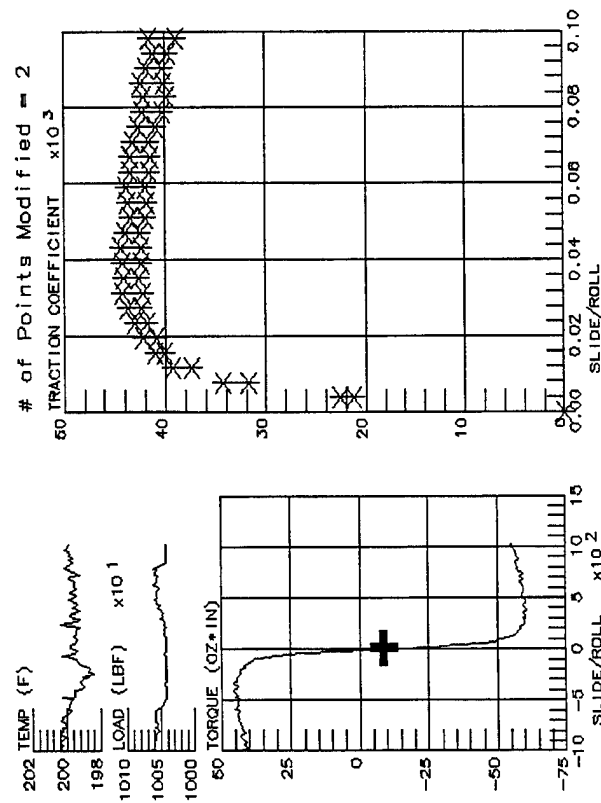
#76
of Points Modified = 3



CC 89-180 Vistalube 7
200F 100LBF 1019RPM 18 FILE: v1st-04

#77

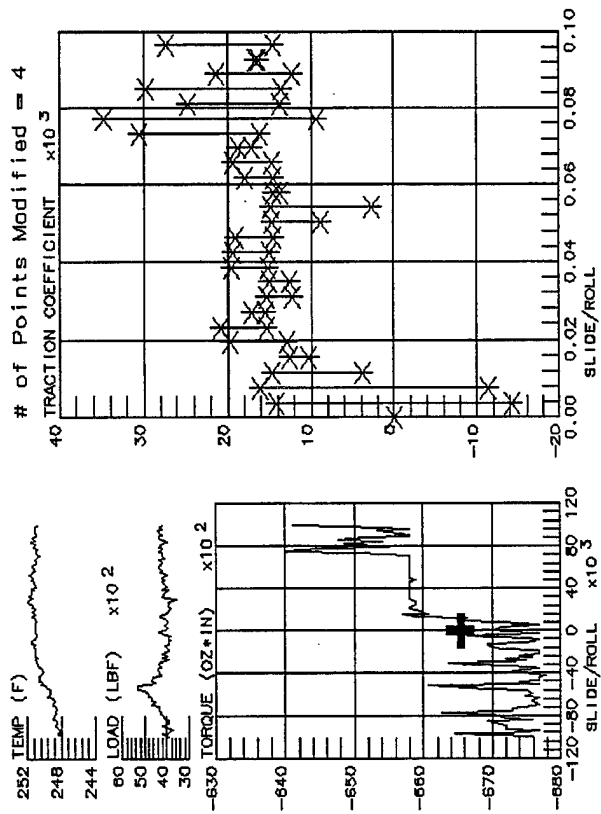
of Points Modified = 2



CC 89-180 Vistalube 7
250F 0LBF 5080RPM 1 FILE: v1st-05

#78

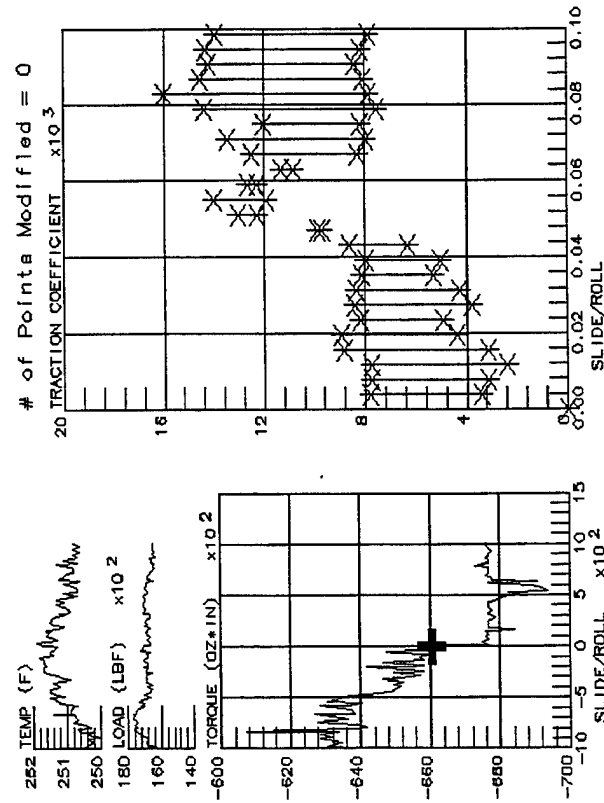
of Points Modified = 4



CC 89-180 Vistalube 7
250F 2LBF 5080RPM 2 FILE: v1st-05

#79

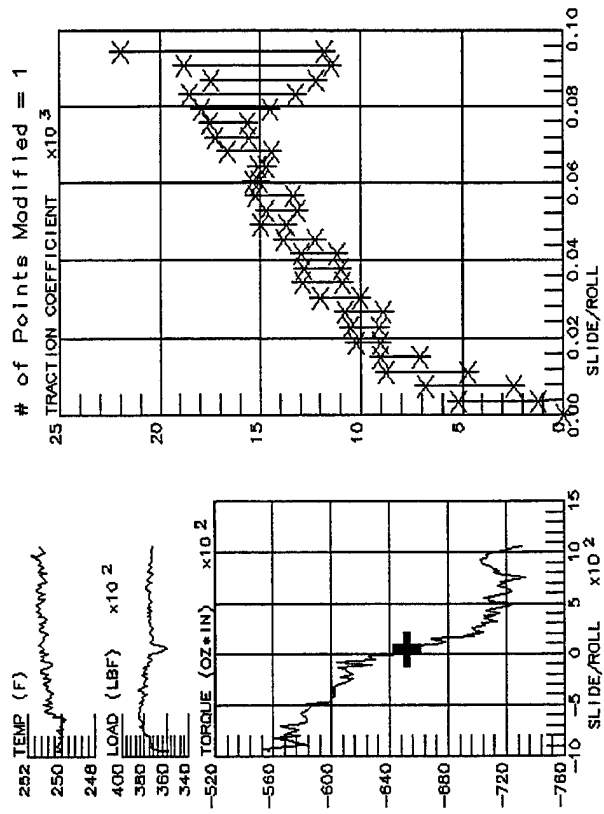
of Points Modified = 0



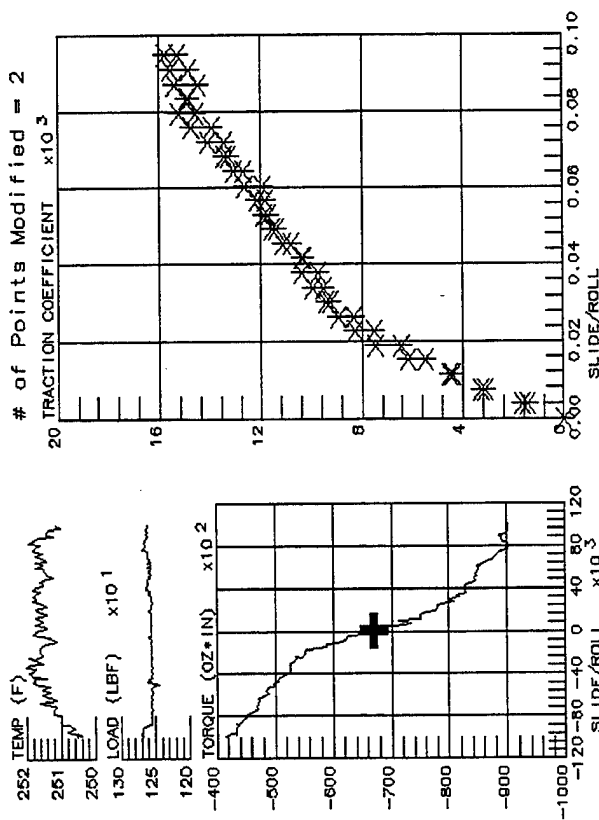
CC 89-180 Vistalube 7
250F 4LBF 5080RPM 3 FILE: v1st-05

#80

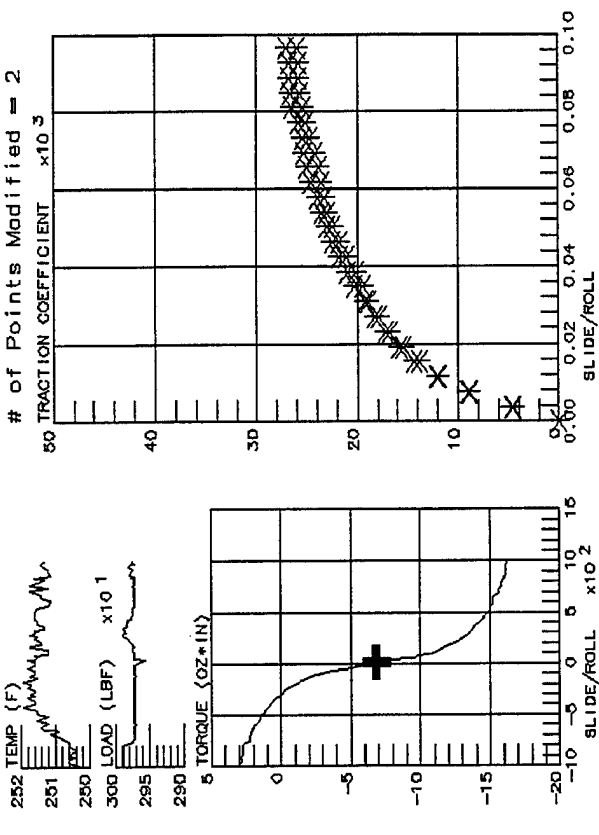
of Points Modified = 1



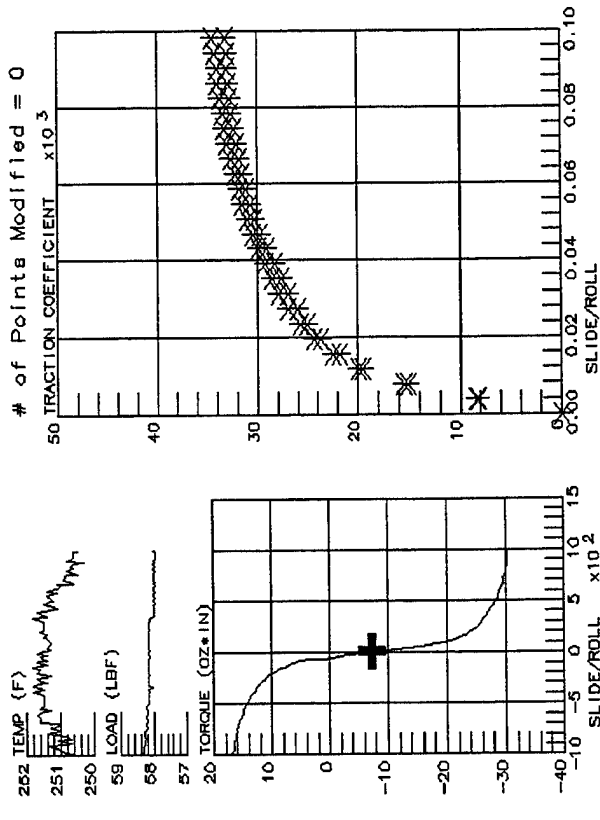
CC 89-180 Vistalube 7 #81
250F 13LBF 5080RPM 4 FILE: v1st-05



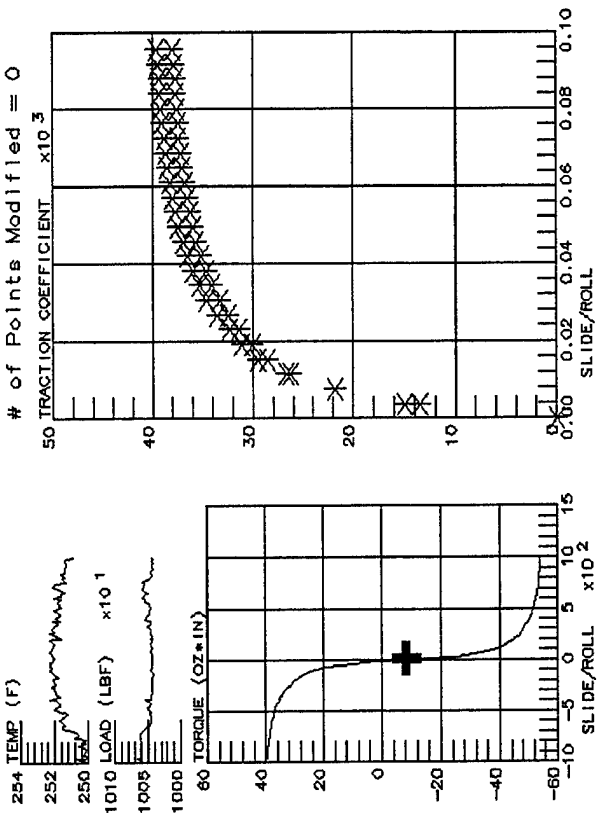
CC 89-180 Vistalube 7 #82
250F 30LBF 5080RPM 5 FILE: v1st-05



CC 89-180 Vistalube 7 #83
250F 56LBF 5080RPM 6 FILE: v1st-05

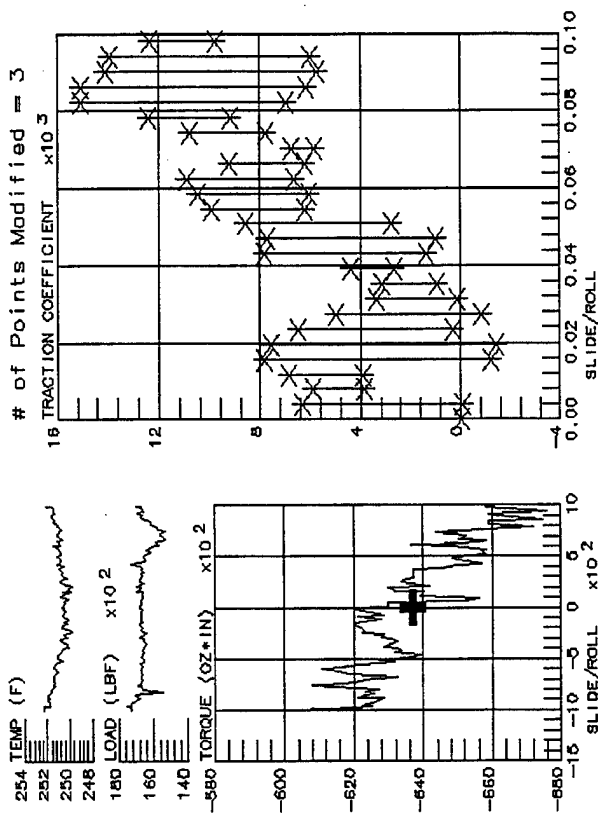
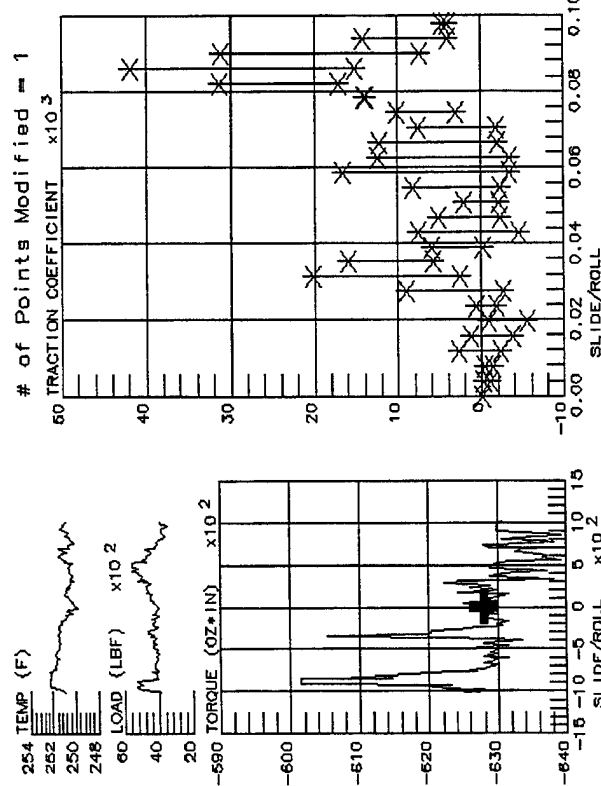


CC 89-180 Vistalube 7 #84
250F 100LBF 5080RPM 7 FILE: v1st-05



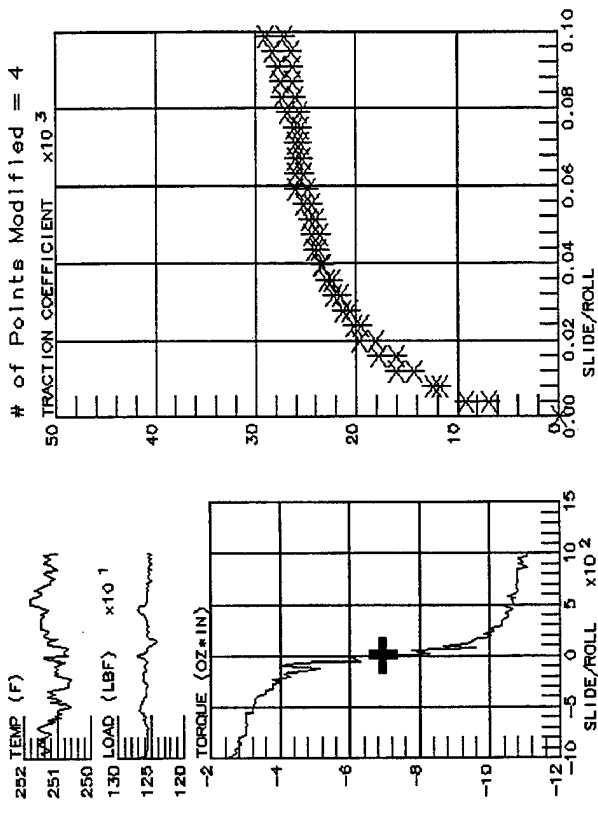
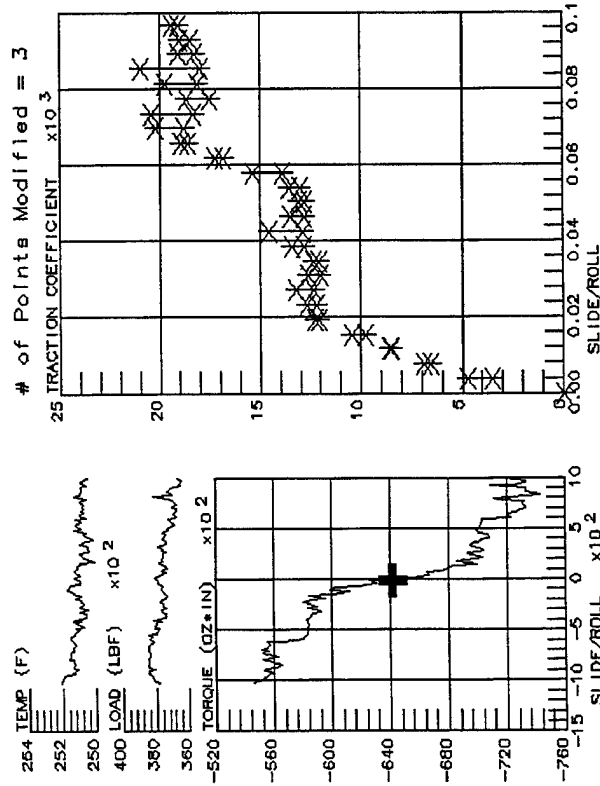
CC 89-180 Vistalube 7
250F 0LBF 7639RPM 8 FILE: v1st-05

CC 89-180 Vistalube 7
250F 2LBF 7639RPM 9 FILE: v1st-05



CC 89-180 Vistalube 7
250F 4LBF 7639RPM 10 FILE: v1st-05

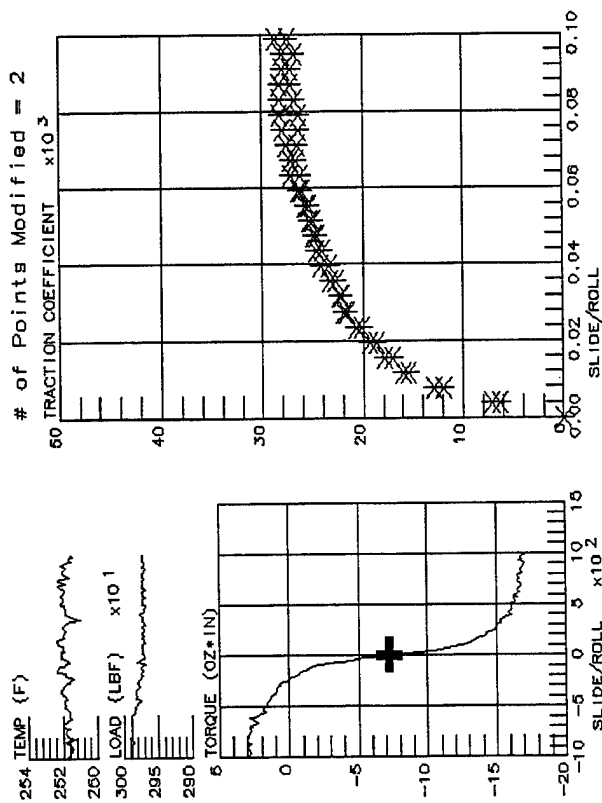
CC 89-180 Vistalube 7
250F 13LBF 7639RPM 11 FILE: v1st-05



CC 89-180 Vistalube 7
250F 30LBF 7639RPM 12 FILE: v1st-05

#89

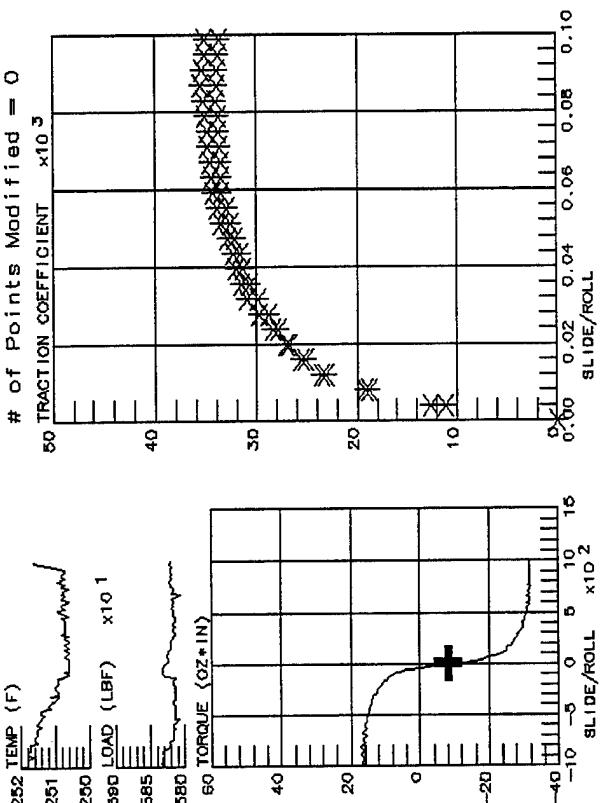
of Points Modified = 2



CC 89-180 Vistalube 7
250F 68LBF 7639RPM 13 FILE: v1st-05

#90

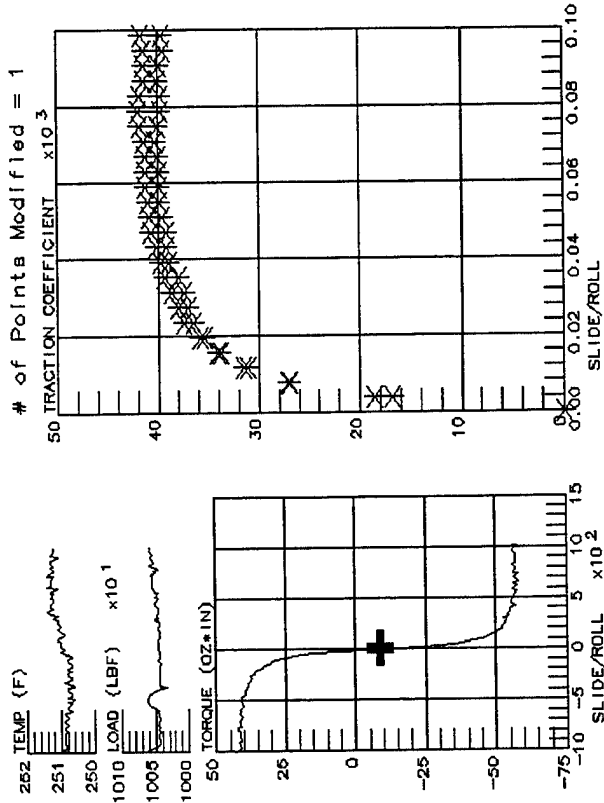
of Points Modified = 0



CC 89-180 Vistalube 7
250F 100LBF 7639RPM 14 FILE: v1st-05

#91

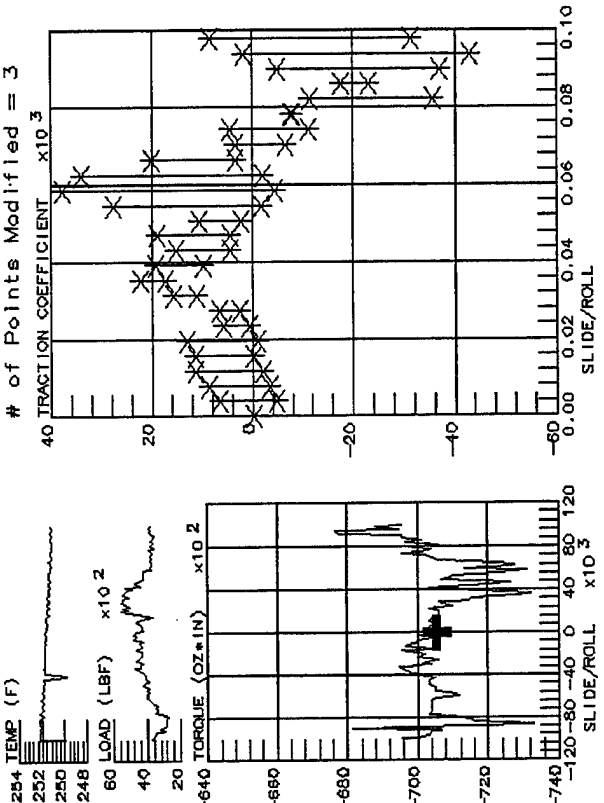
of Points Modified = 1



CC 89-180 Vistalube 7
250F 1019RPM 15 FILE: v1st-05

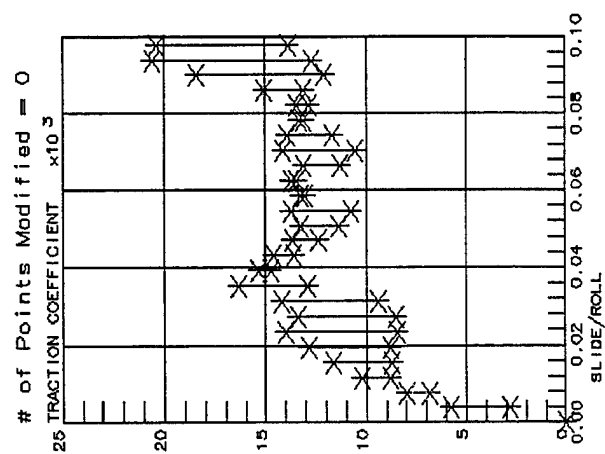
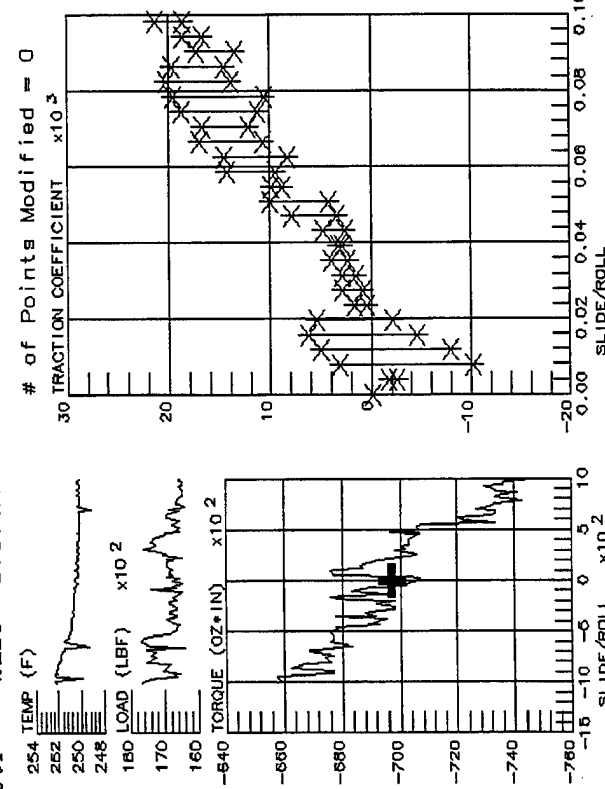
#92

of Points Modified = 3



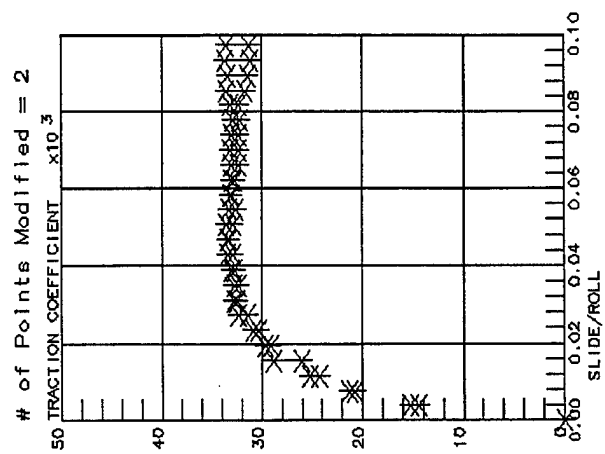
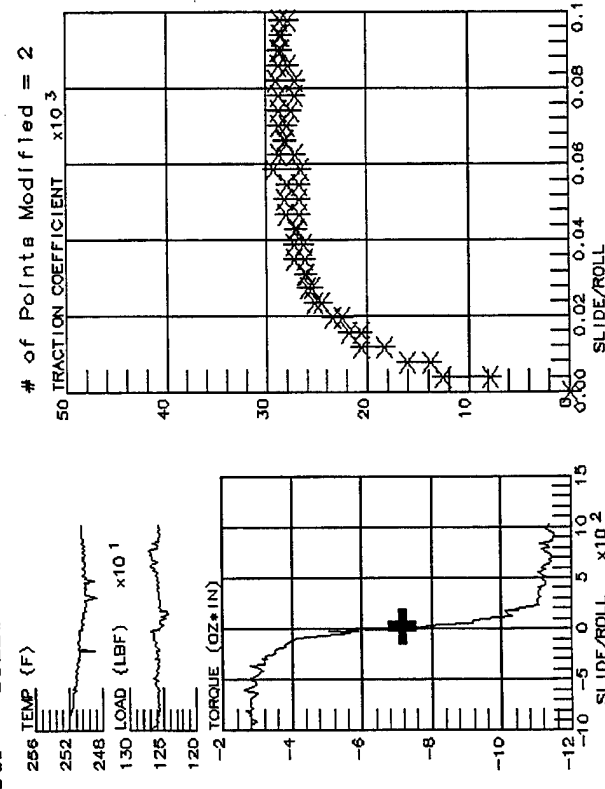
CC 89-180 Vistalube 7
250F 2LBF 10198RPM 16 FILE: v1st-05

CC 89-180 Vistalube 7
250F 4LBF 10198RPM 17 FILE: v1st-06

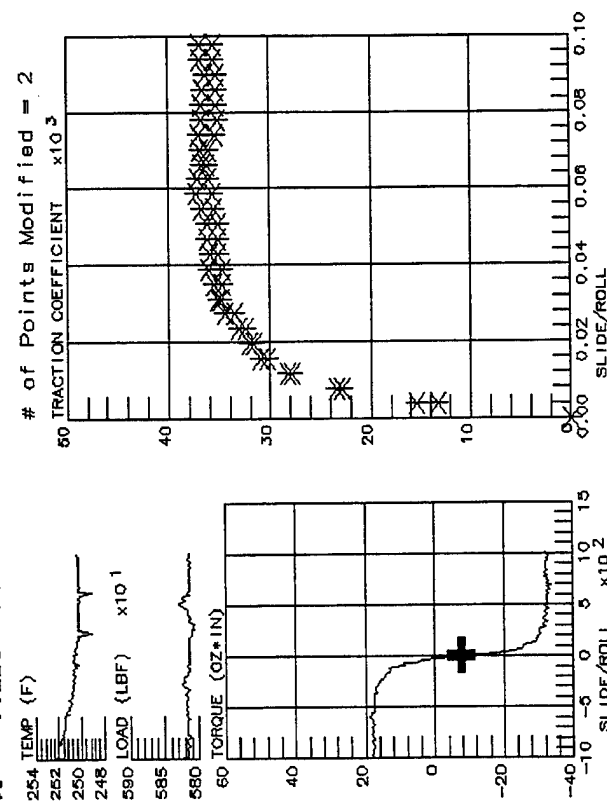


CC 89-180 Vistalube 7
250F 13LBF 10198RPM 18 FILE: v1st-05

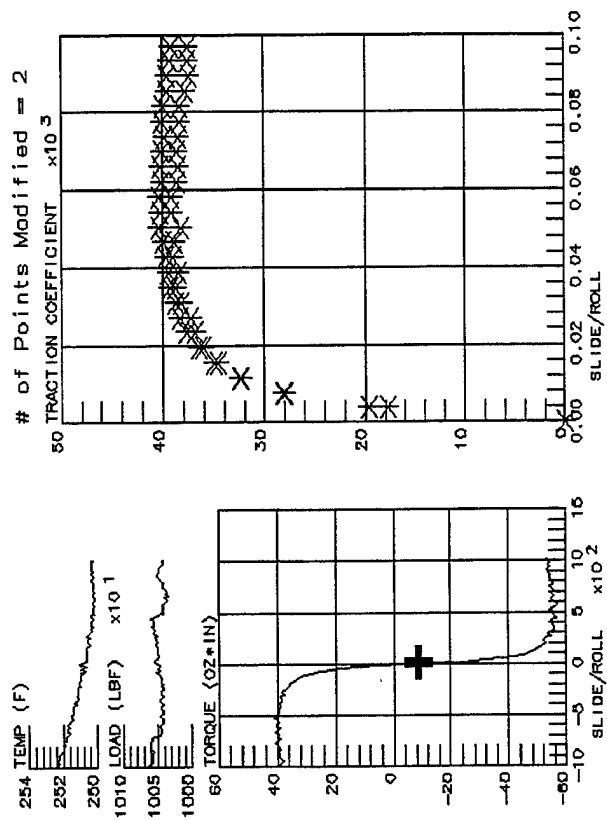
CC 89-180 Vistalube 7
250F 30LBF 10198RPM 19 FILE: v1st-05



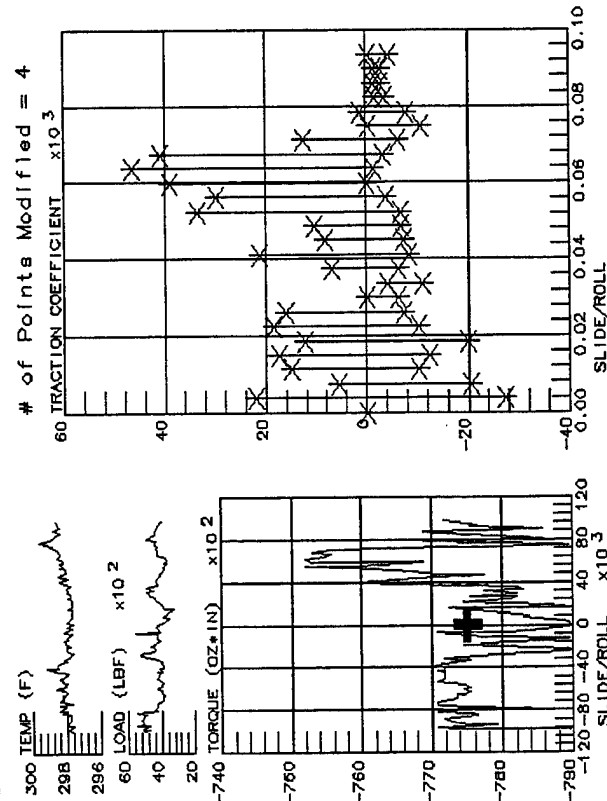
CC 89-180 Vistalube 7 #97
250F 58LBF 1019RPM 20 FILE: v1st-06



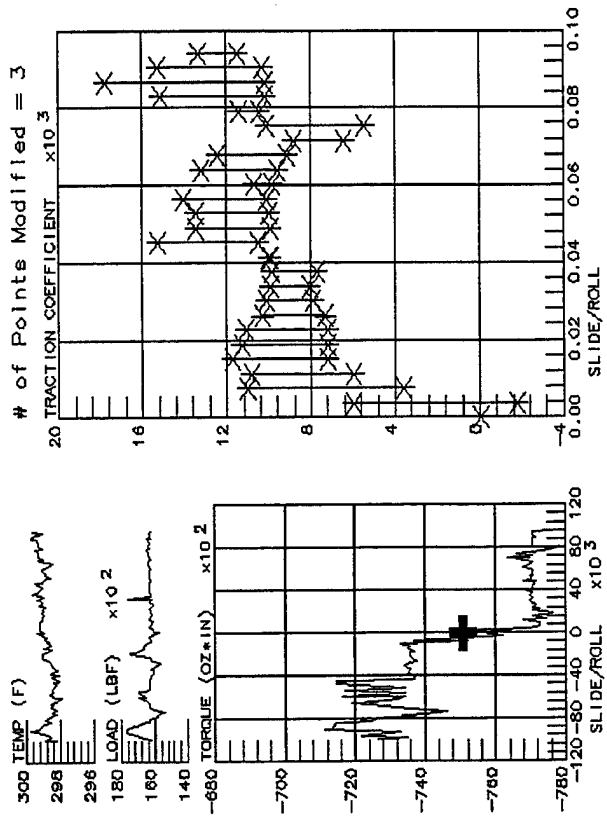
CC 89-180 Vistalube 7 #98
250F 100LBF 1019RPM 21 FILE: v1st-05



CC 89-180 Vistalube 7 #99
300F 0LBF 5080RPM 1 FILE: v1st-06

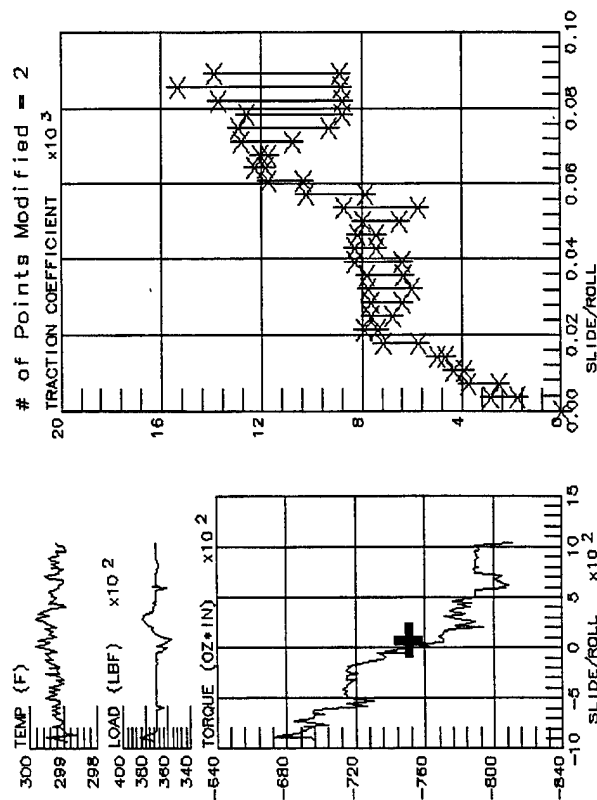


CC 89-180 Vistalube 7 #100
300F 2LBF 5080RPM 2 FILE: v1st-06



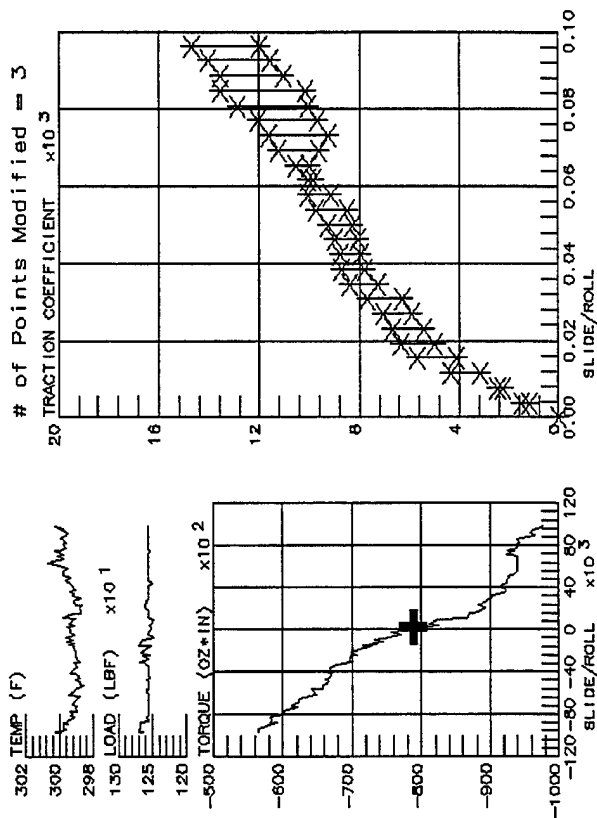
CC 89-180 Vistalube 7 #101
300F 4LBF 5080RPM 3 FILE: v1st-06

of Points Modified = 2



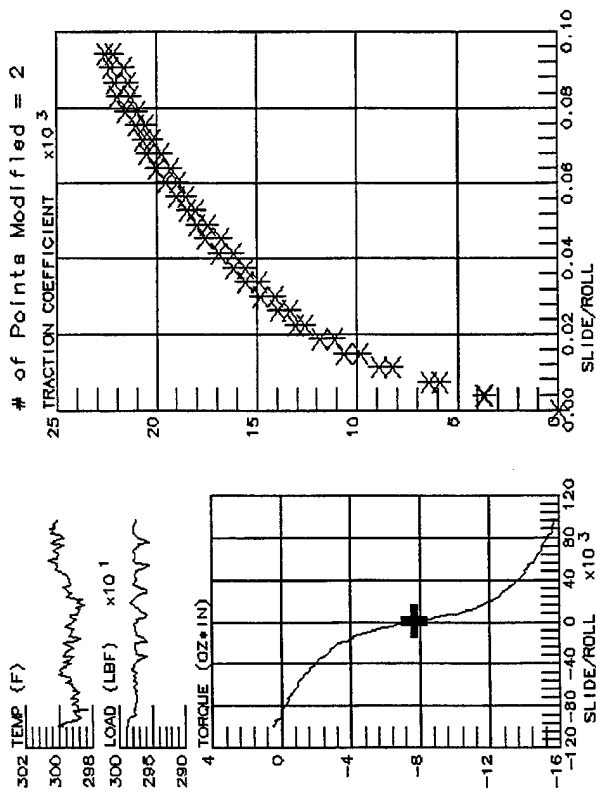
CC 89-180 Vistalube 7 #102
300F 13LBF 5080RPM 4 FILE: v1st-06

of Points Modified = 3



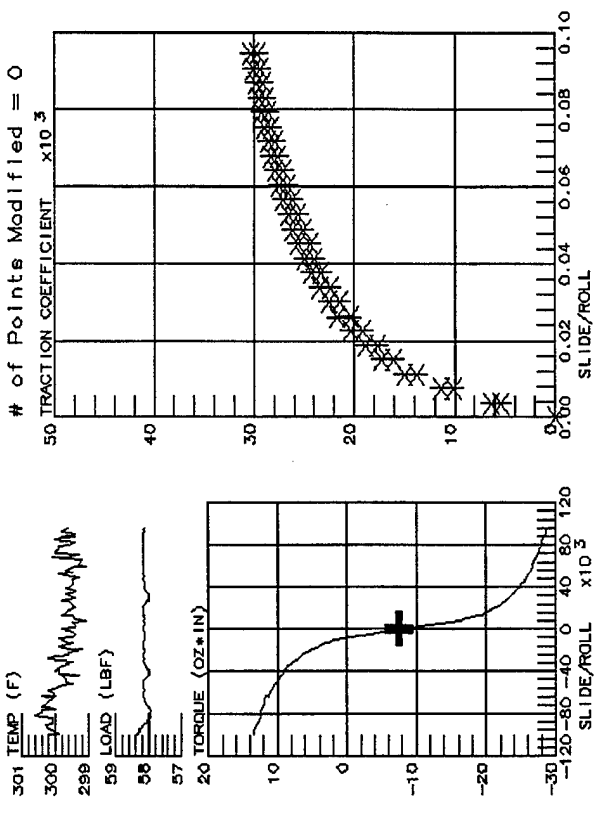
CC 89-180 Vistalube 7 #103
300F 30LBF 5080RPM 5 FILE: v1st-06

of Points Modified = 2



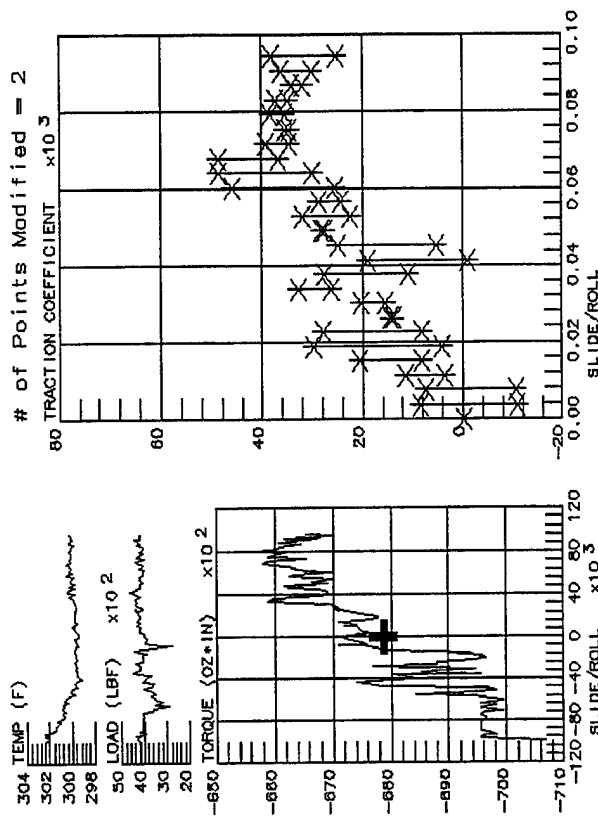
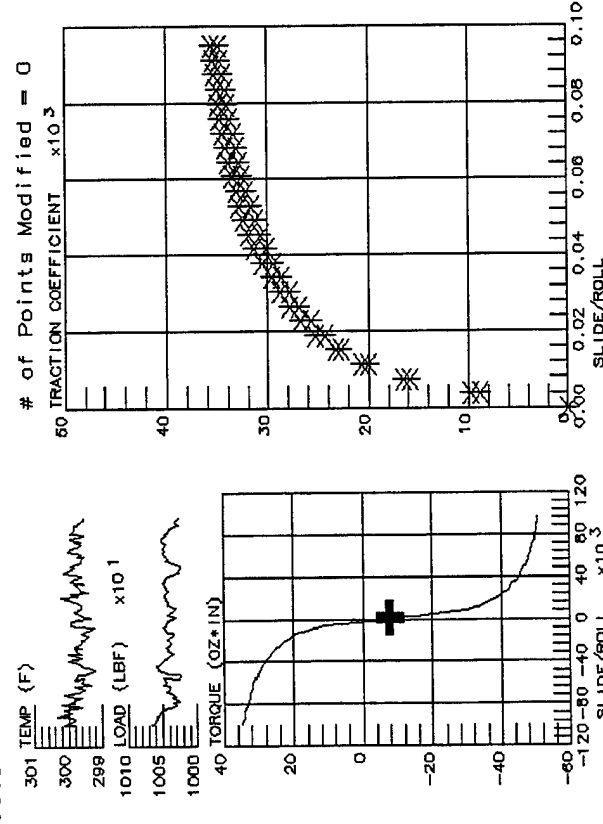
CC 89-180 Vistalube 7 #104
300F 58LBF 5080RPM 6 FILE: v1st-06

of Points Modified = 0



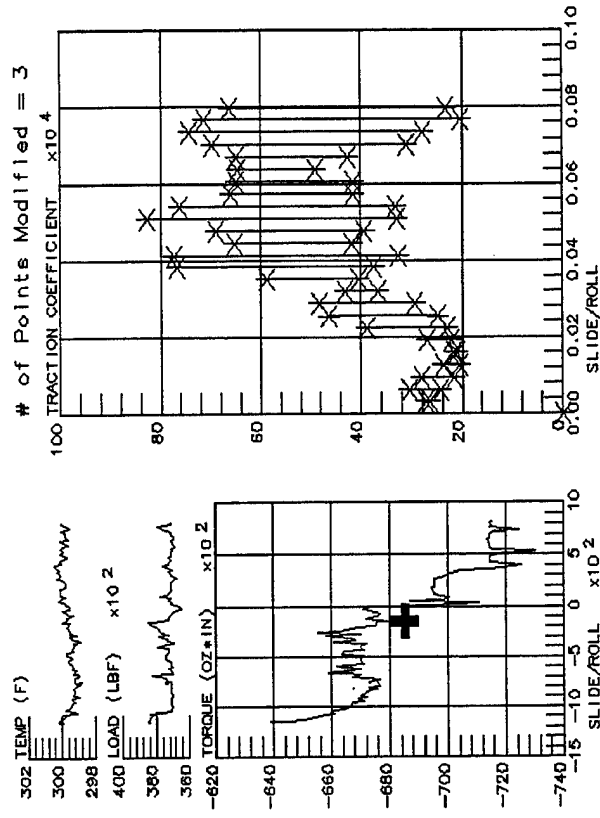
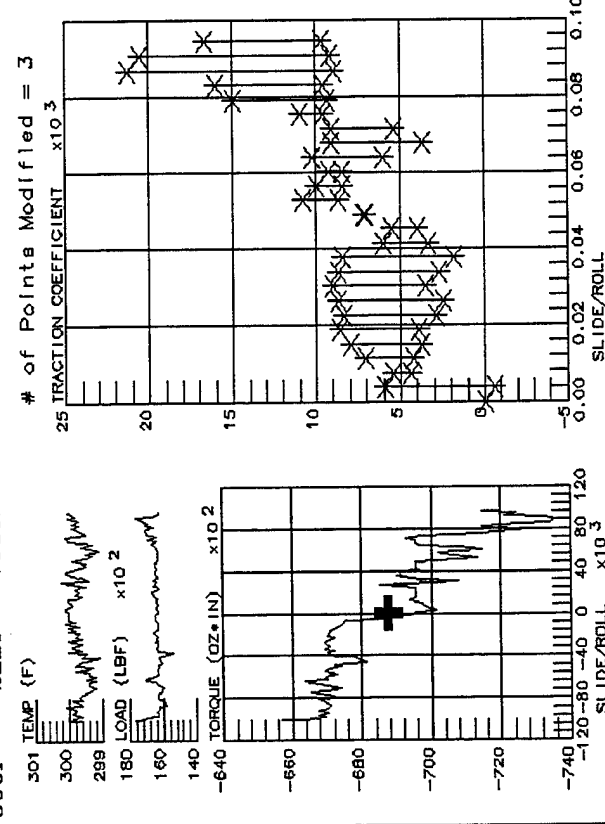
CC 89-180 Vistalube 7
300F 100LBF 5080RPM 7 FILE: v1st-06

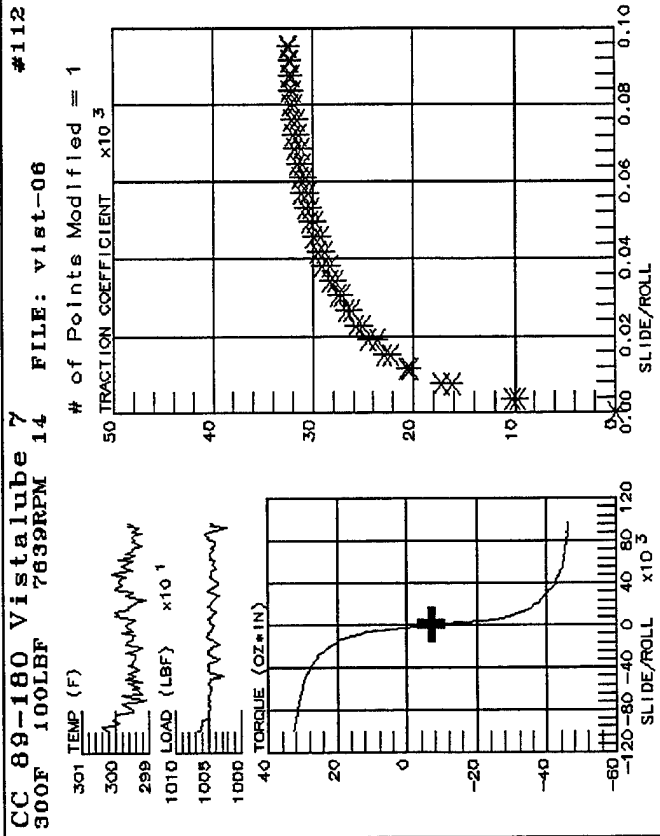
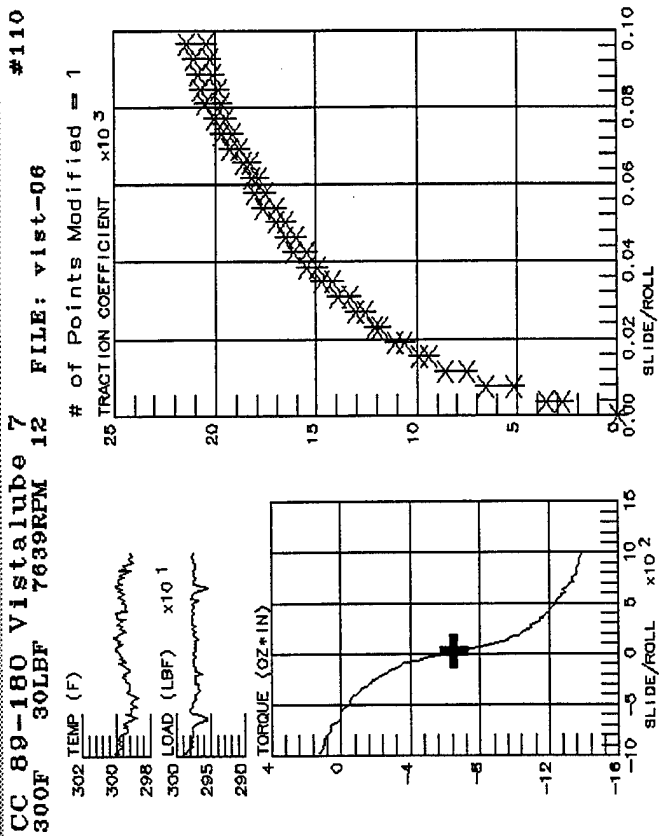
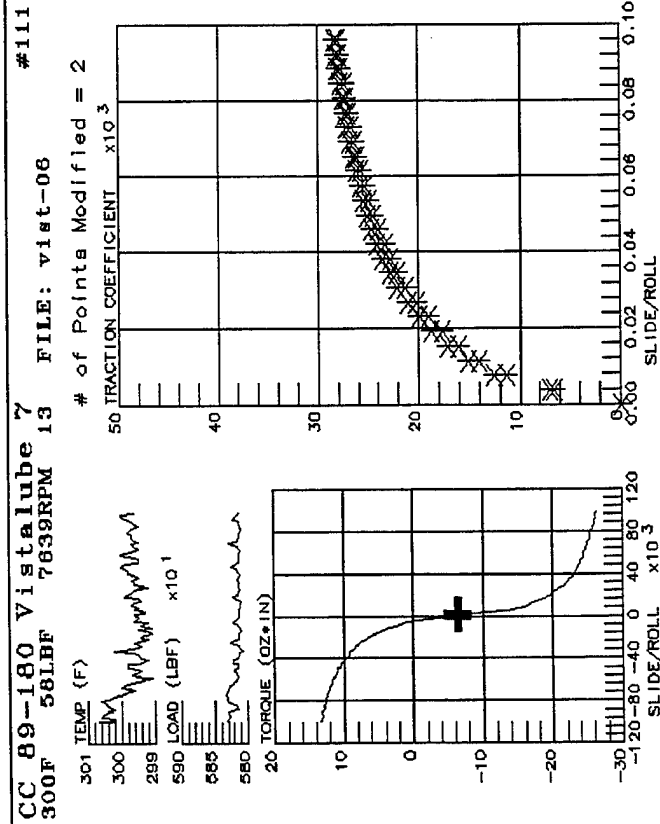
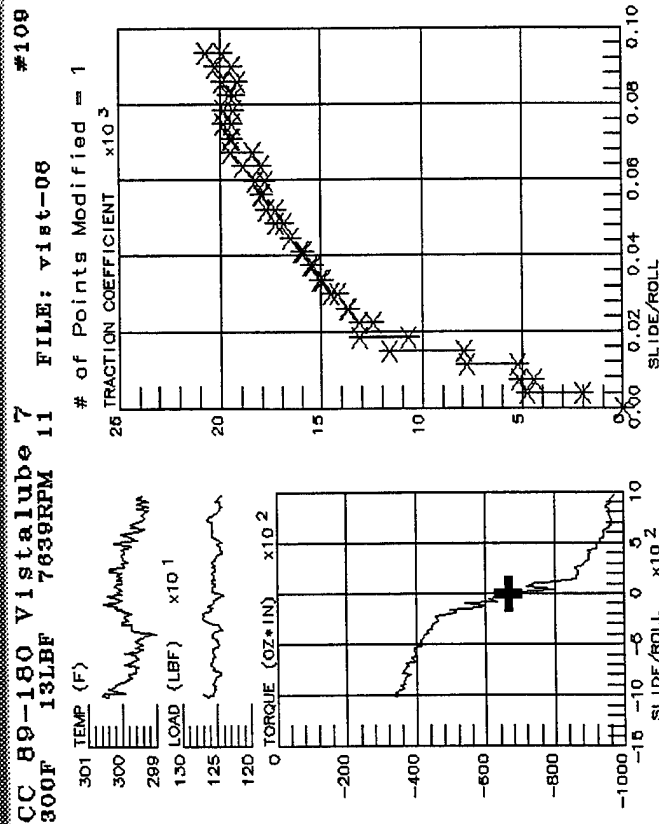
CC 89-180 Vistalube 7
300F 0LBF 7639RPM 8 FILE: v1st-06



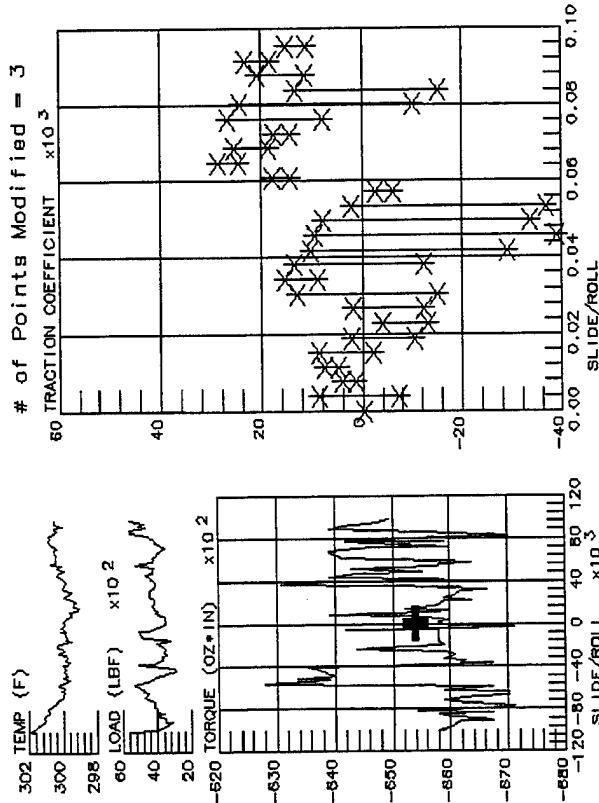
CC 89-180 Vistalube 7
300F 2LBF 7639RPM 9 FILE: v1st-06

CC 89-180 Vistalube 7
300F 4LBF 7639RPM 10 FILE: v1st-06

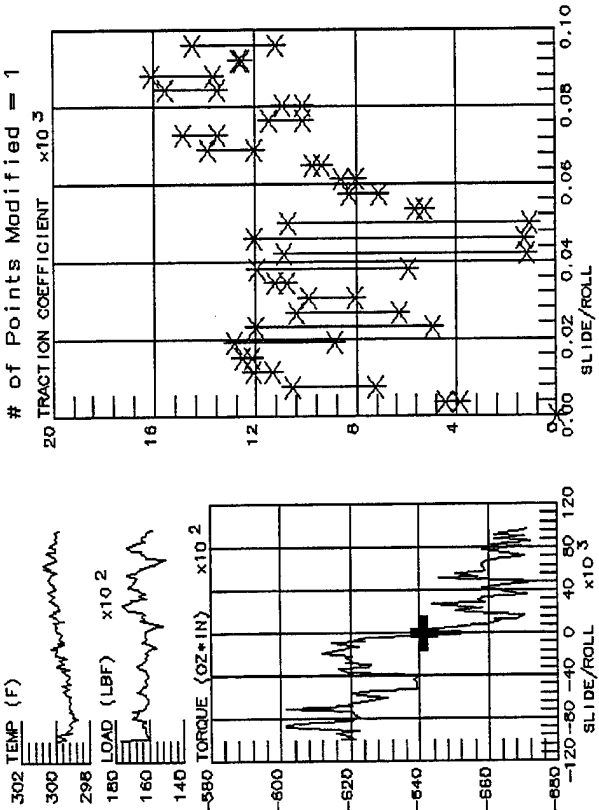




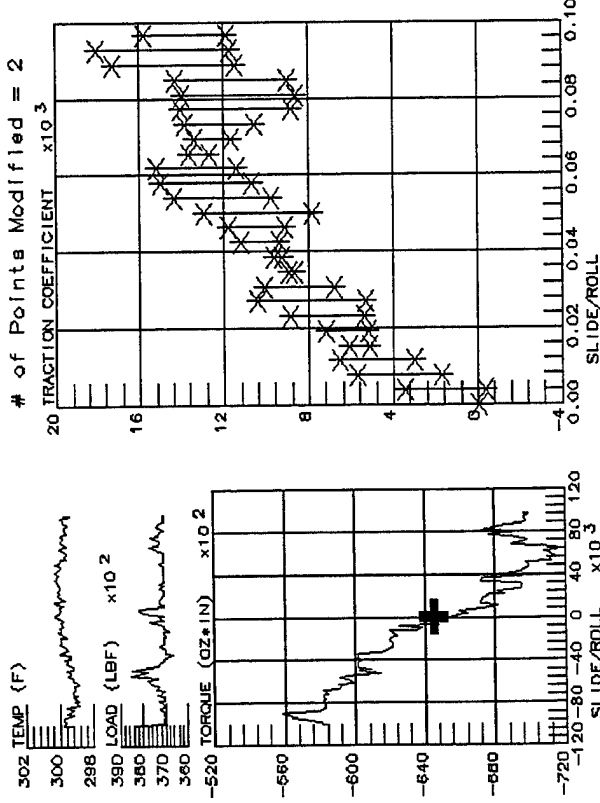
CC 89-180 Vistalube 7 #113
300F 0LBF 10198RPM 15 FILE: v1st-06



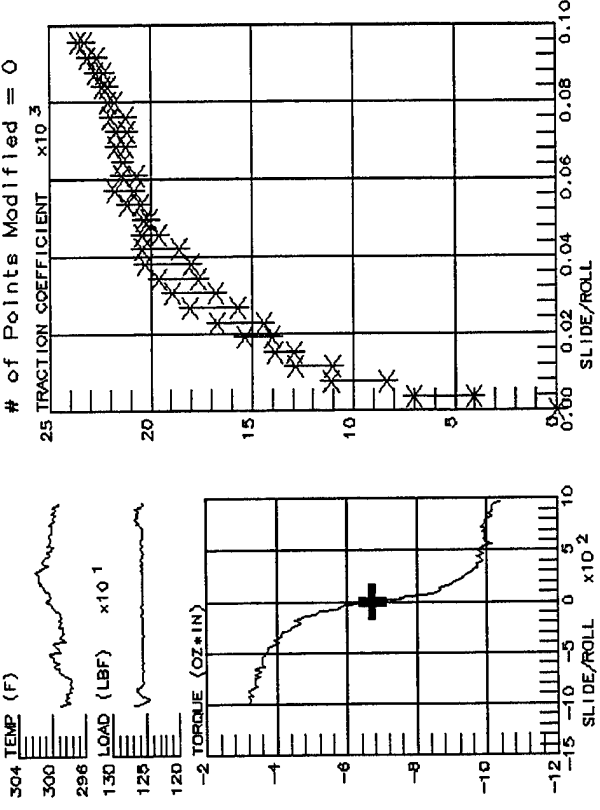
CC 89-180 Vistalube 7 #114
300F 2LBF 10198RPM 16 FILE: v1st-06



CC 89-180 Vistalube 7 #115
300F 4LBF 10198RPM 17 FILE: v1st-06

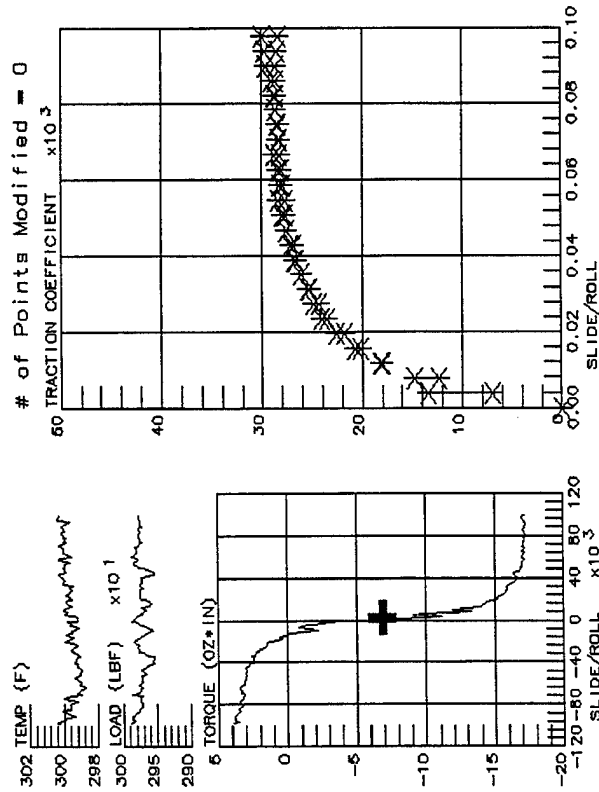


CC 89-180 Vistalube 7 #116
300F 13LBF 10198RPM 18 FILE: v1st-06



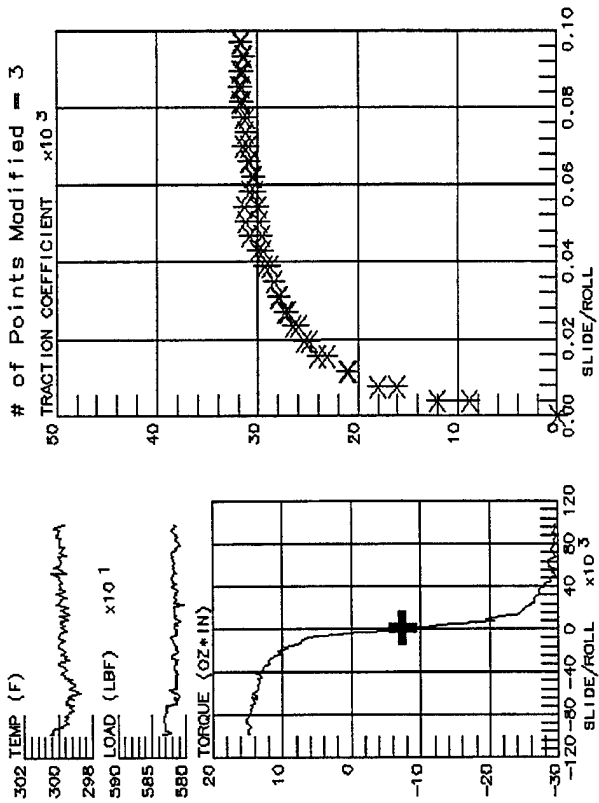
CC 89-180 Vistalube 7
300F 30LBF 10198RPM 19 FILE: v1st-06 #117

of Points Modified = 0



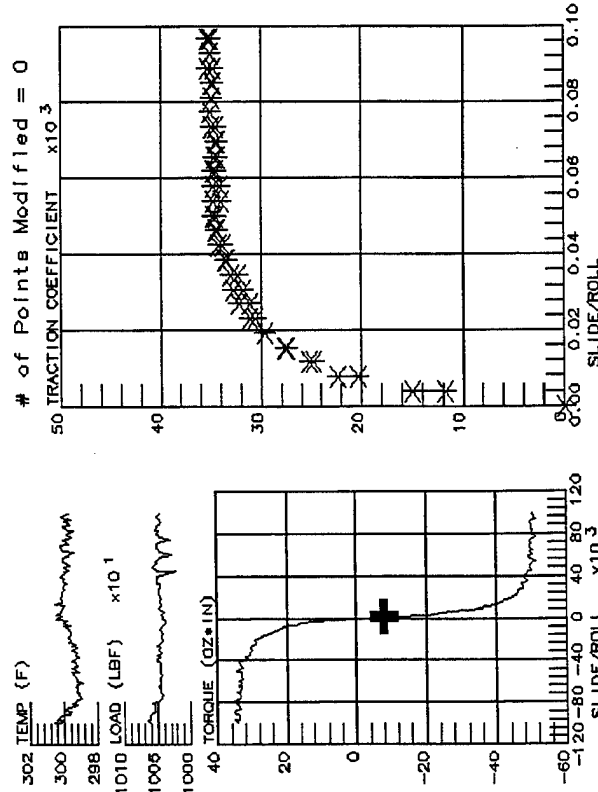
CC 89-180 Vistalube 7
300F 58LBF 10198RPM 20 FILE: v1st-06 #118

of Points Modified = 3



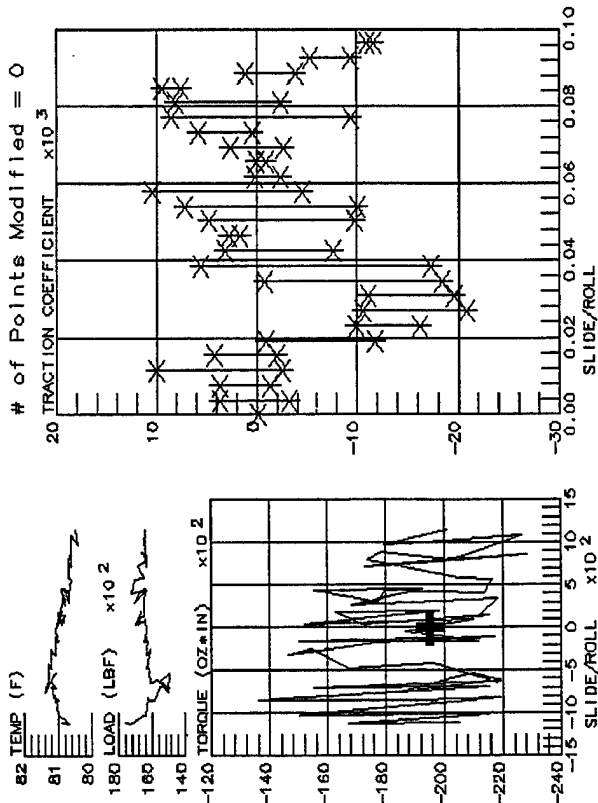
CC 89-180 Vistalube 7
300F 100LBF 10198RPM 21 FILE: v1st-06 #119

of Points Modified = 0



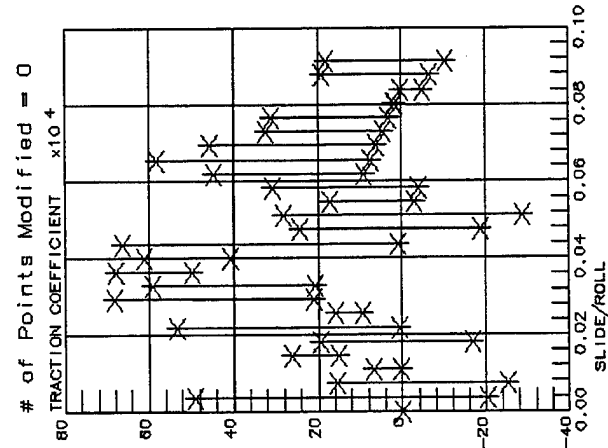
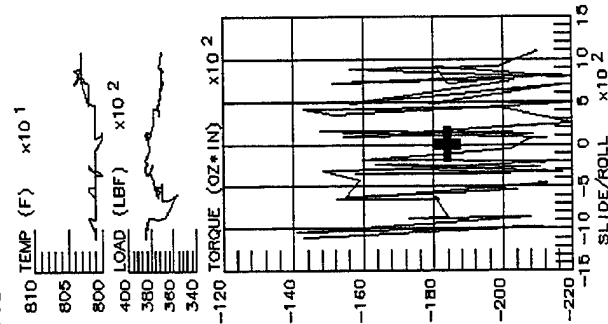
CC 89-180 Vistalube 7
80F 2LBF 76RPM 1 FILE: v1st-07 #120

of Points Modified = 0



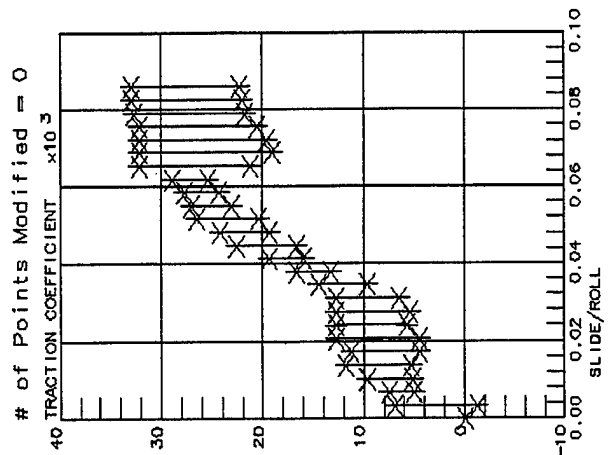
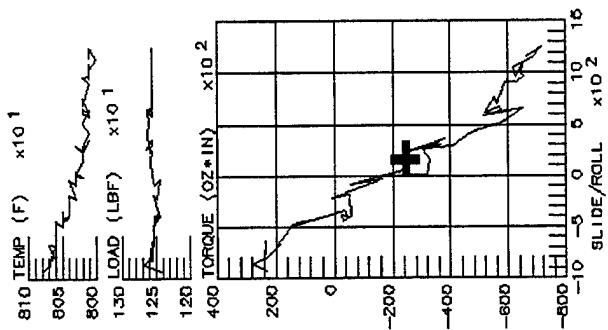
SHIRAZI, HOSSEIN

CC 89-180 Vistalube 7
80F 4LBF 76RPM 2 FILE: v1st-07
#121

of Points Modified = 0
TRACTION COEFFICIENT = 0.4

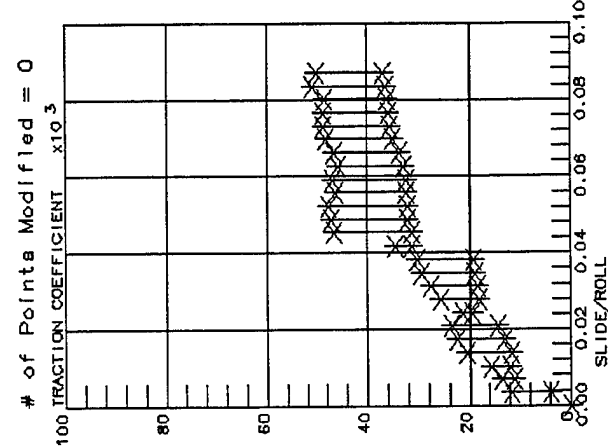
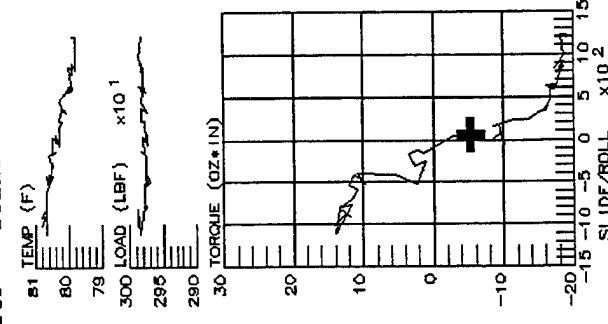
CC 89-180 Vistalube 7
80F 13LBF 78RPM 3 FILE: v1st-07 #122

of Points Modified = 0



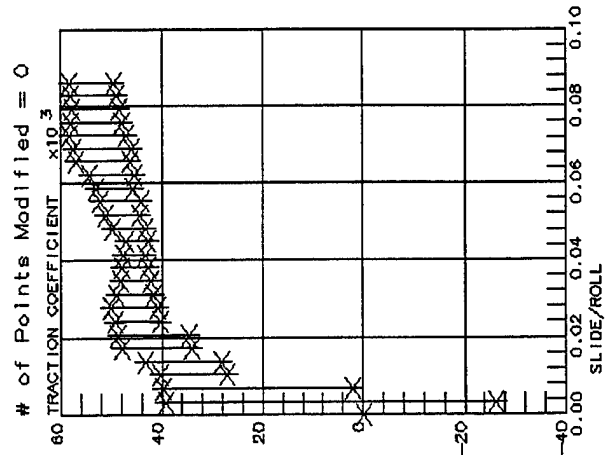
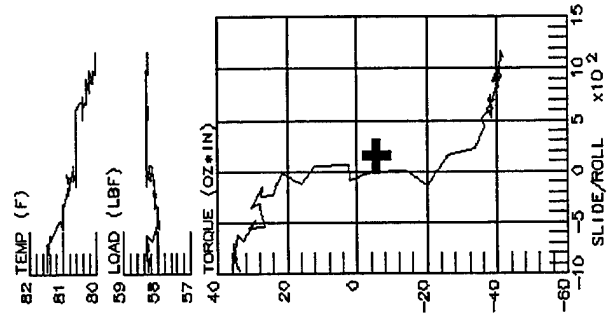
CC 89-180 Vistalube 7
80F 30LBF 76RPM 4 FILE: v1st-07 #123

of Points Modified = 0

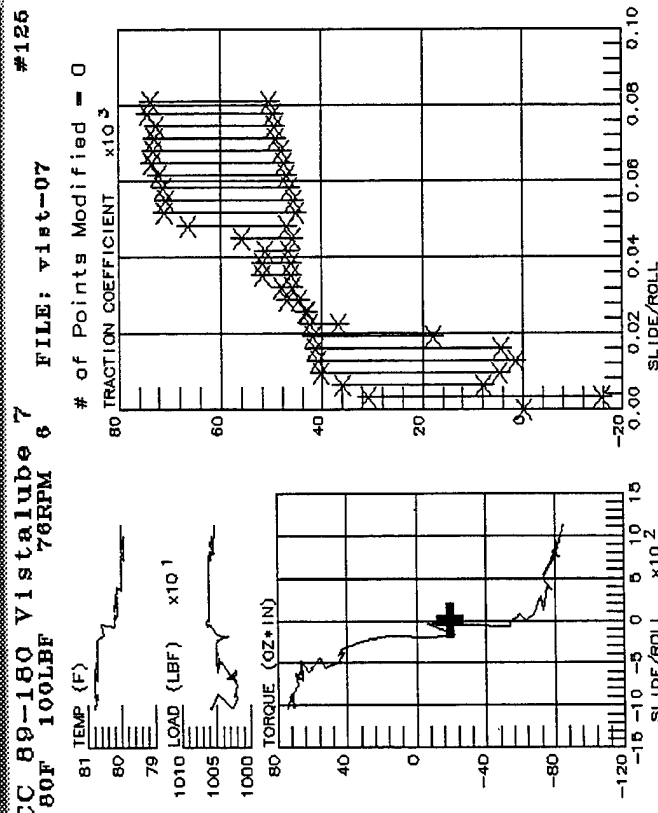


CC 89-180 Vistalube 7
80F 58LBF 76RPM 5 FILE: v1st-07 #124

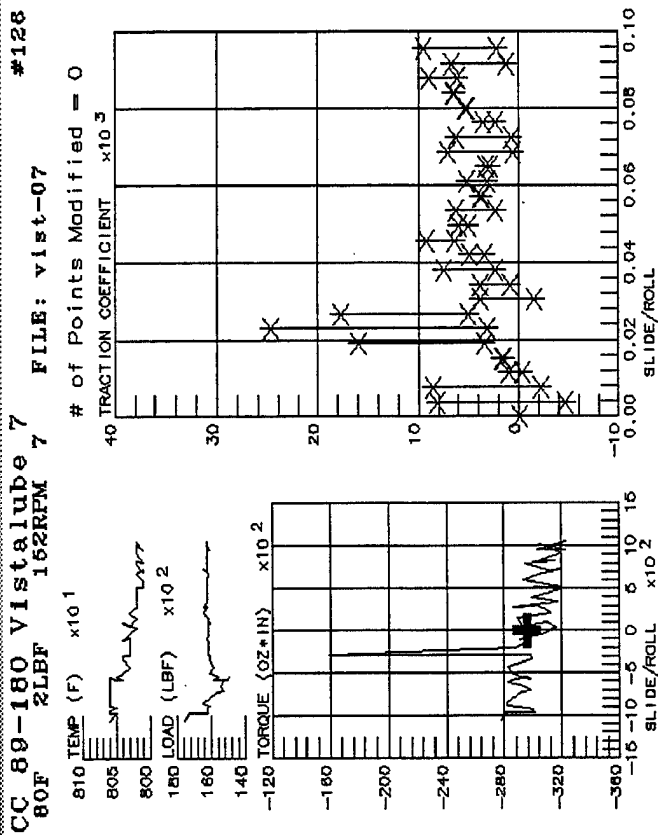
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# of Points Modified = 0
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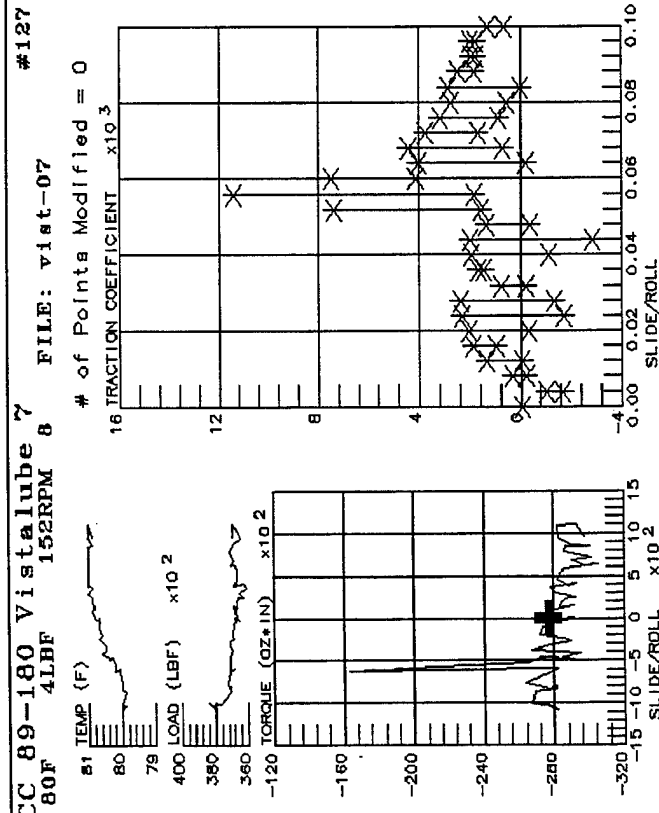
CC 89-180 Vistalube 7
80F 100LBF 76RPM 8 FILE: v1st-07



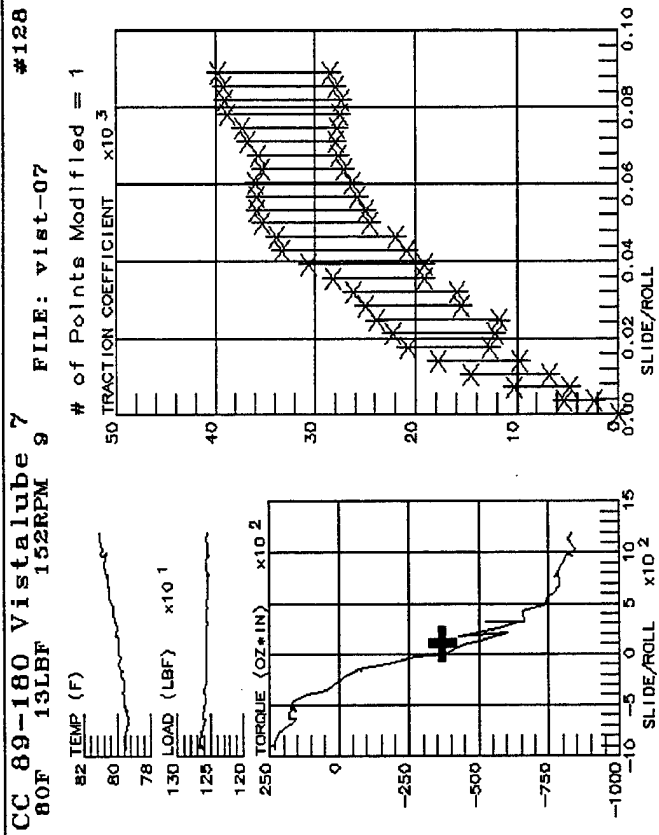
CC 89-180 Vistalube 7
80F 2LBF 152RPM 7 FILE: v1st-07



CC 89-180 Vistalube 7
80F 4LBF 152RPM 8 FILE: v1st-07



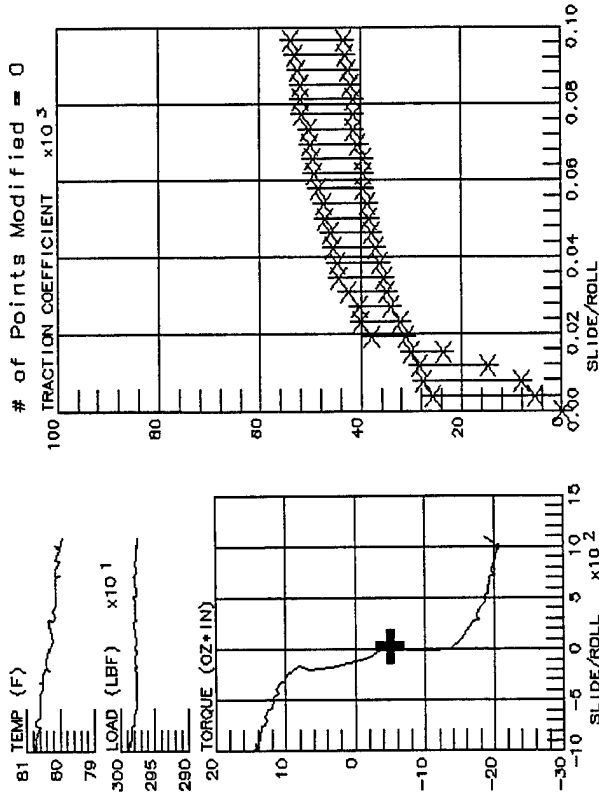
CC 89-180 Vistalube 7
80F 13LBF 152RPM 9 FILE: v1st-07



CC 89-180 Vistalube 7
80F 30LBF 152RPM 10 FILE: v1st-07

#129

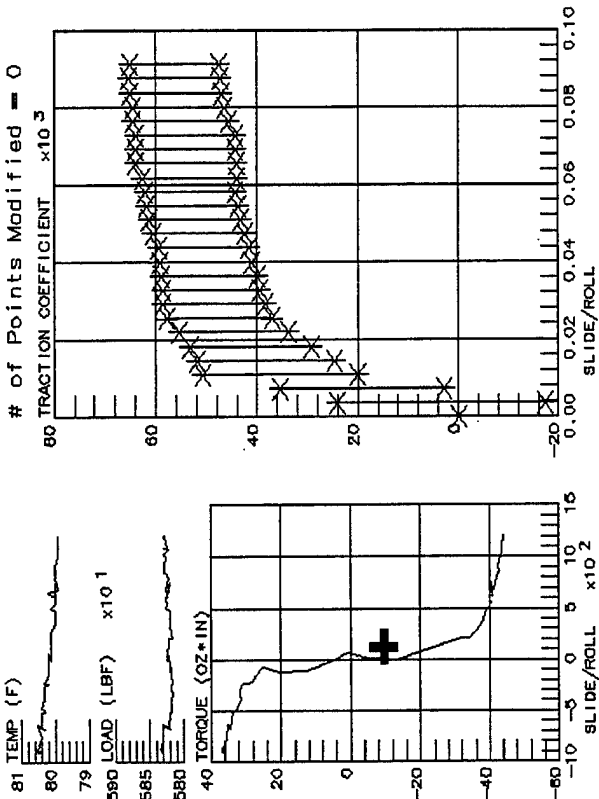
of Points Modified = 0



CC 89-180 Vistalube 7
80F 68LBF 162RPM 11 FILE: v1st-07

#130

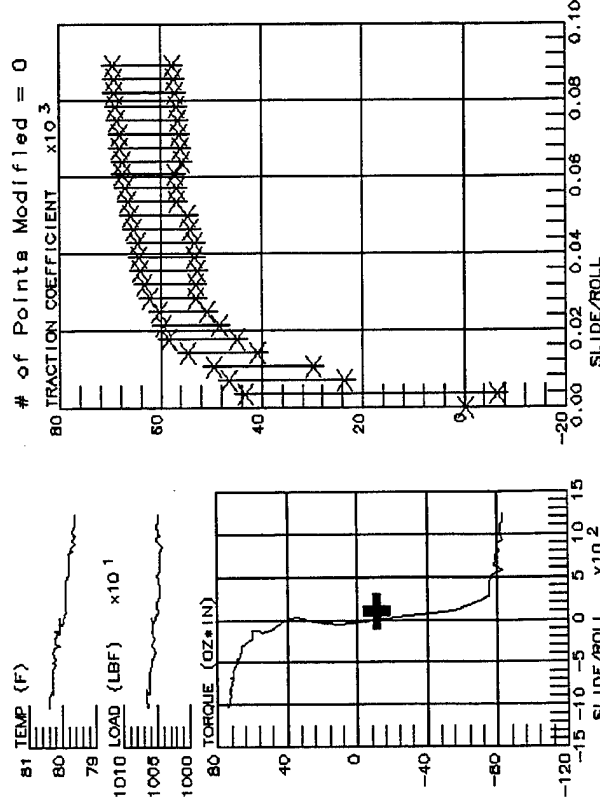
of Points Modified = 0



CC 89-180 Vistalube 7
80F 100LBF 152RPM 12 FILE: v1st-07

#131

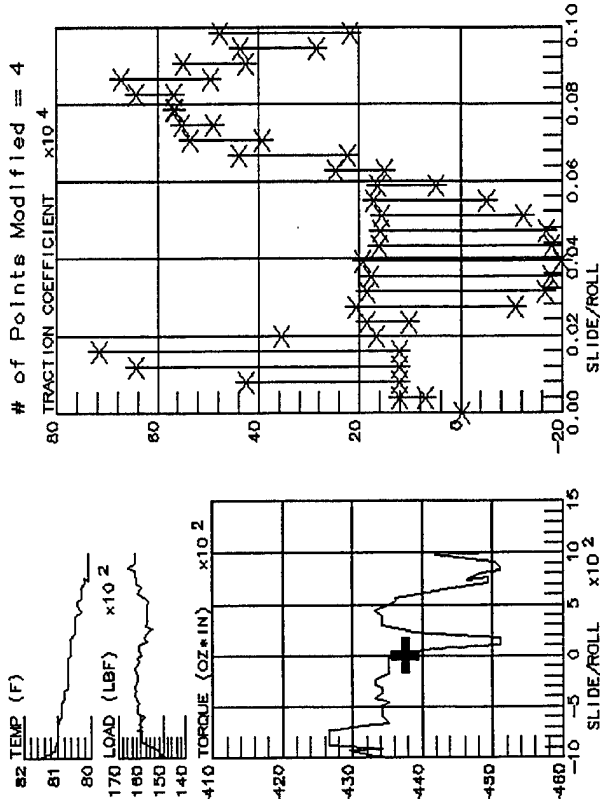
of Points Modified = 0



CC 89-180 Vistalube 7
80F 2LBF 343RPM 13 FILE: v1st-07

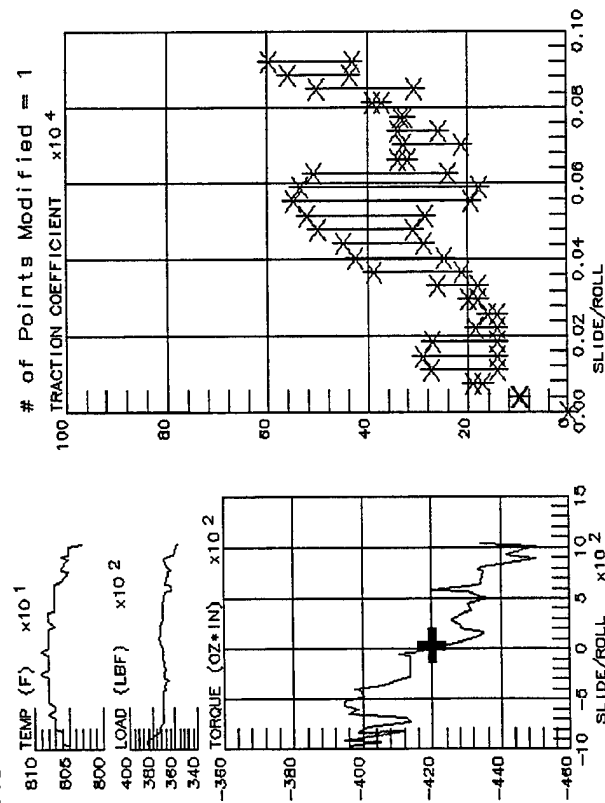
#132

of Points Modified = 4



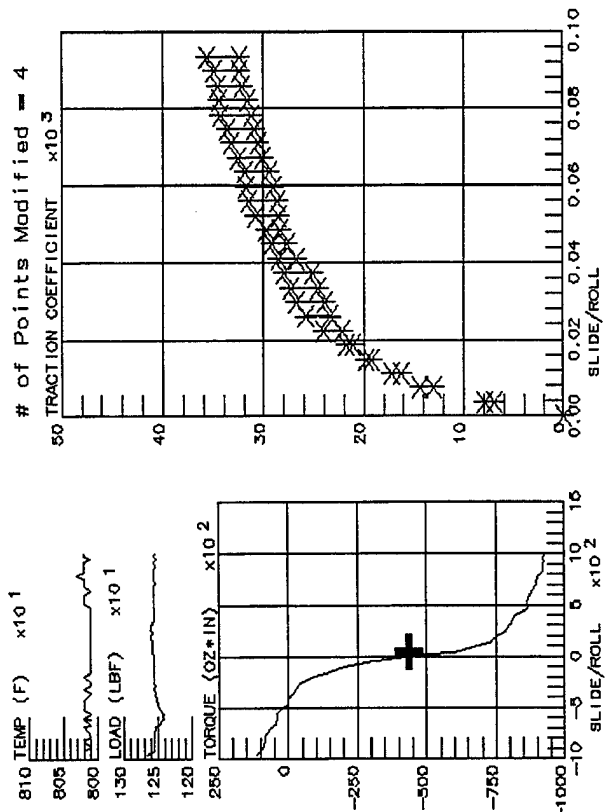
CC 89-180 Vistalube 7
80F 4LBF 343RPM 14 FILE: v1st-07

#133
of Points Modified = 1



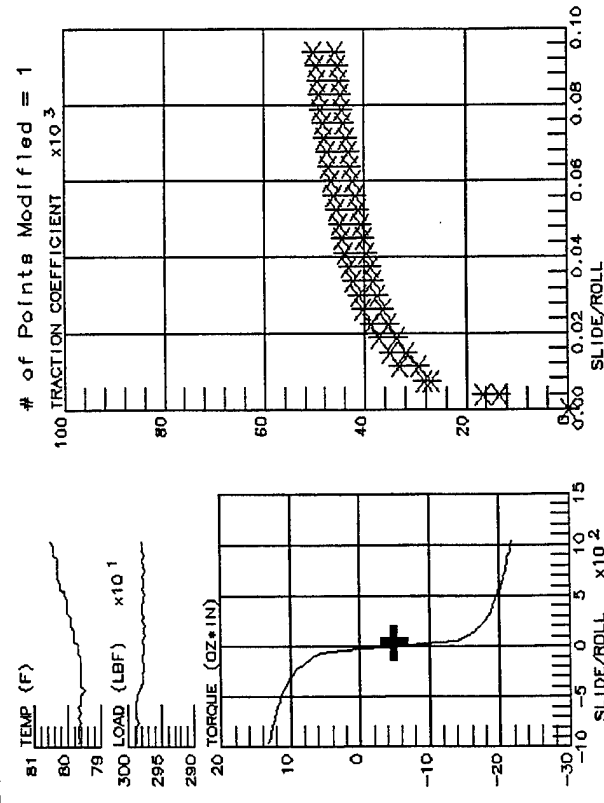
CC 89-180 Vistalube 7
80F 13LBF 343RPM 15 FILE: v1st-07

#134
of Points Modified = 4



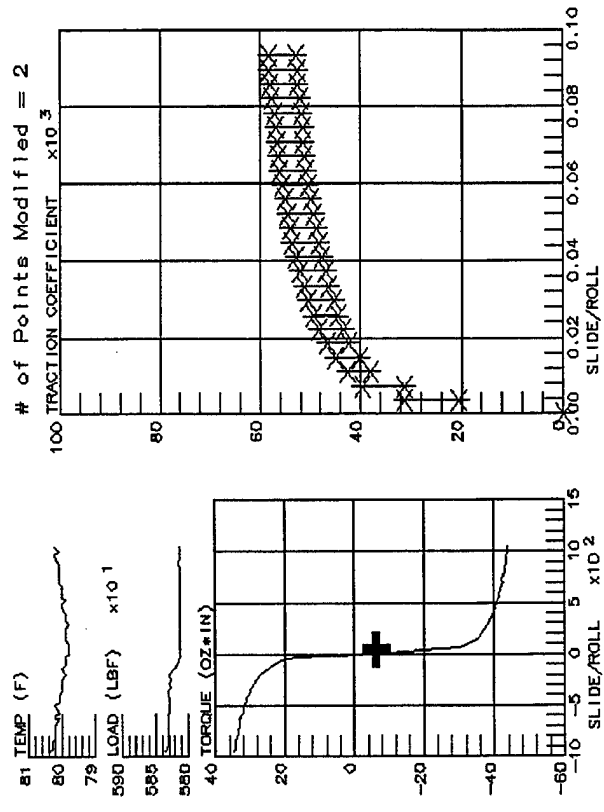
CC 89-180 Vistalube 7
80F 30LBF 343RPM 16 FILE: v1st-07

#135
of Points Modified = 1

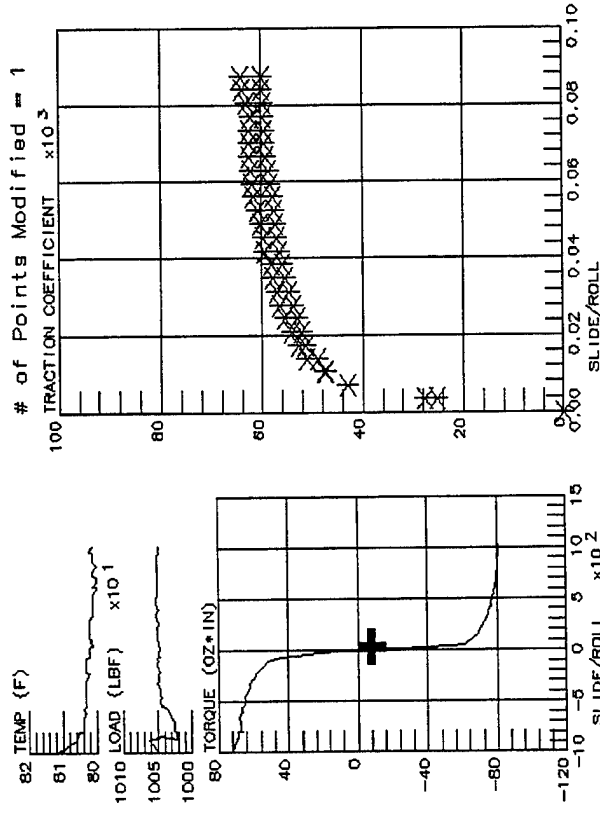


CC 89-180 Vistalube 7
80F 58LBF 343RPM 17 FILE: v1st-07

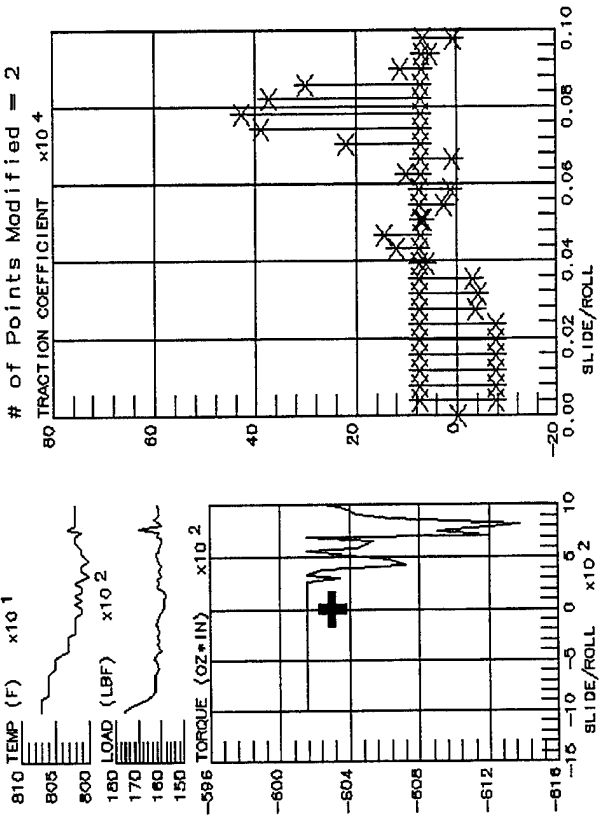
#136
of Points Modified = 2



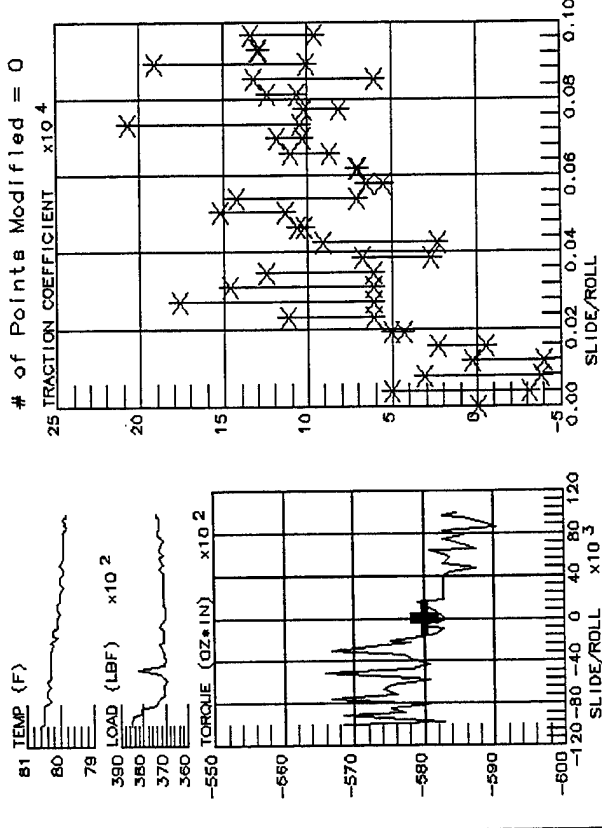
CC 89-180 Vistalube 7
80F 100LBF 343RPM 18 FILE: v1st-07 #137



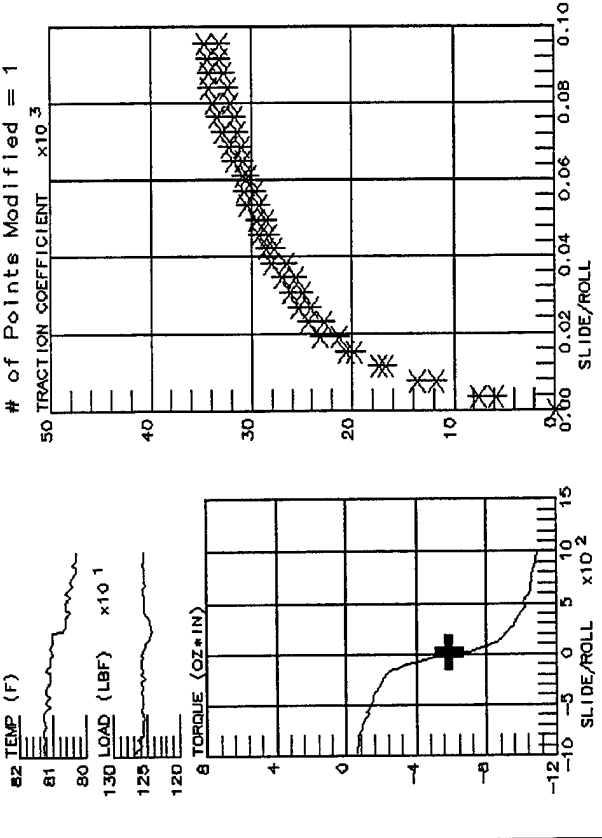
CC 89-180 Vistalube 7
80F 2LBF 650RPM 19 FILE: v1st-07 #138



CC 89-180 Vistalube 7
80F 4LBF 650RPM 20 FILE: v1st-07 #139

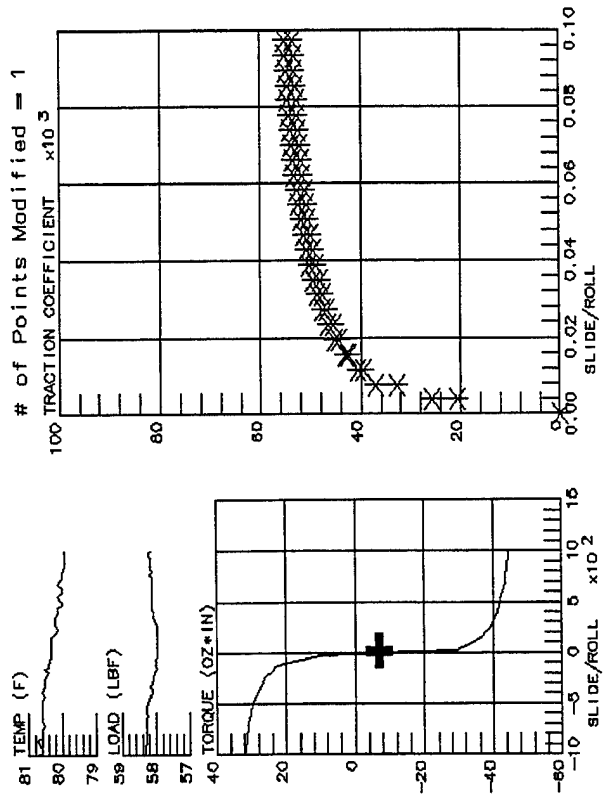
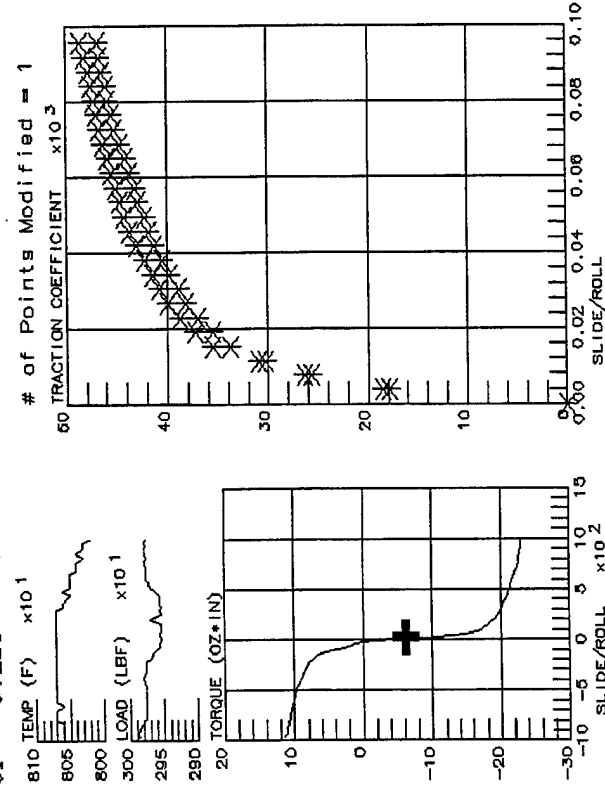


CC 89-180 Vistalube 7
80F 13LBF 650RPM 21 FILE: v1st-07 #140



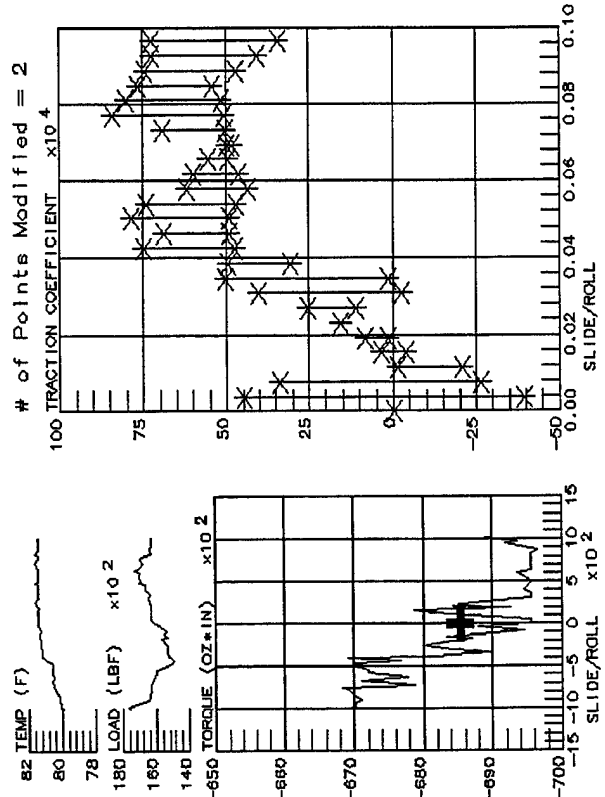
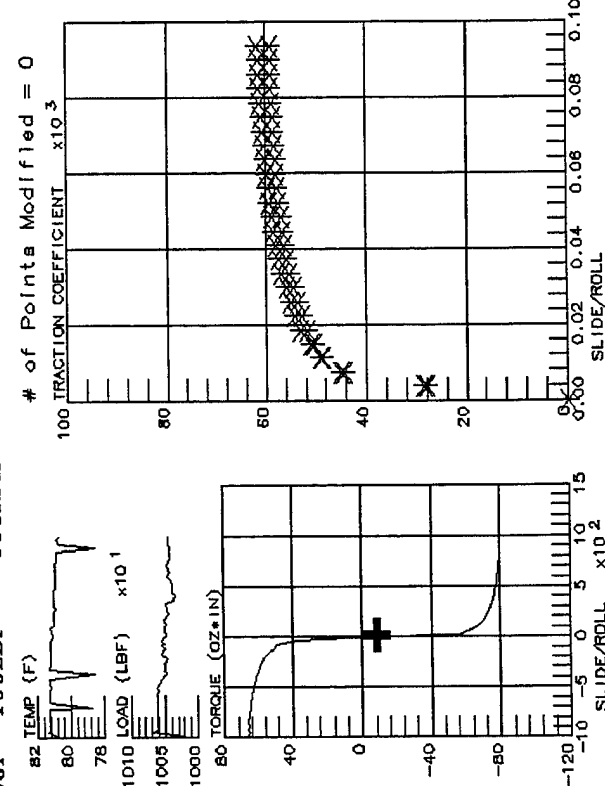
CC 89-180 Vistalube 7
80F 30LBF 650RPM 22 FILE: v1st-07

#141
of Points Modified = 1

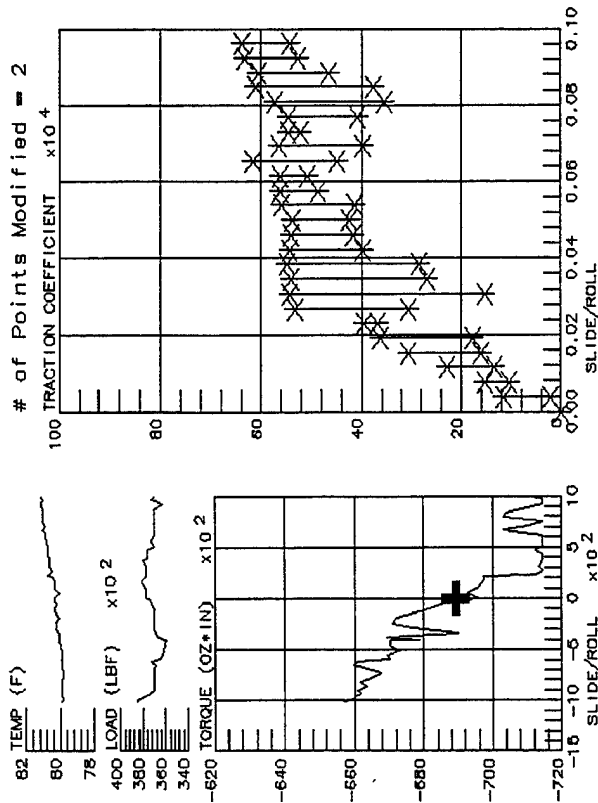


CC 89-180 Vistalube 7
80F 100LBF 650RPM 24 FILE: v1st-07

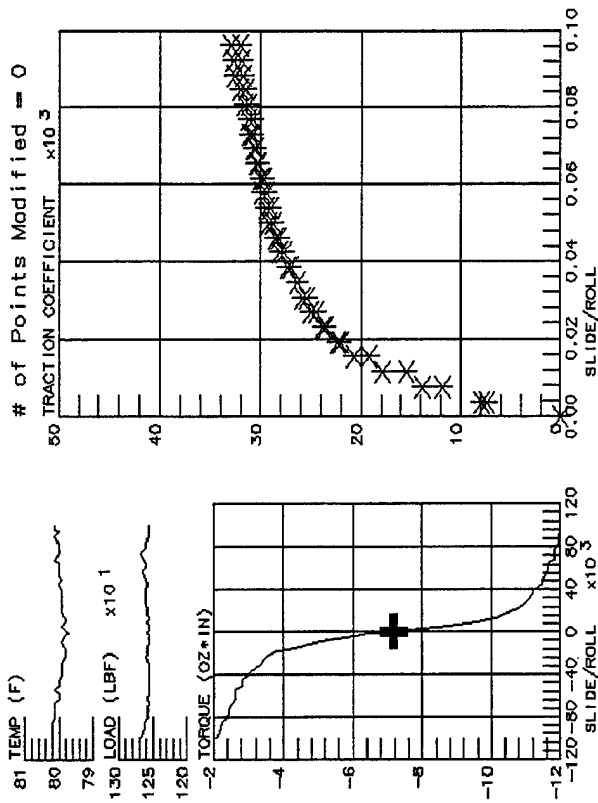
#143
of Points Modified = 0



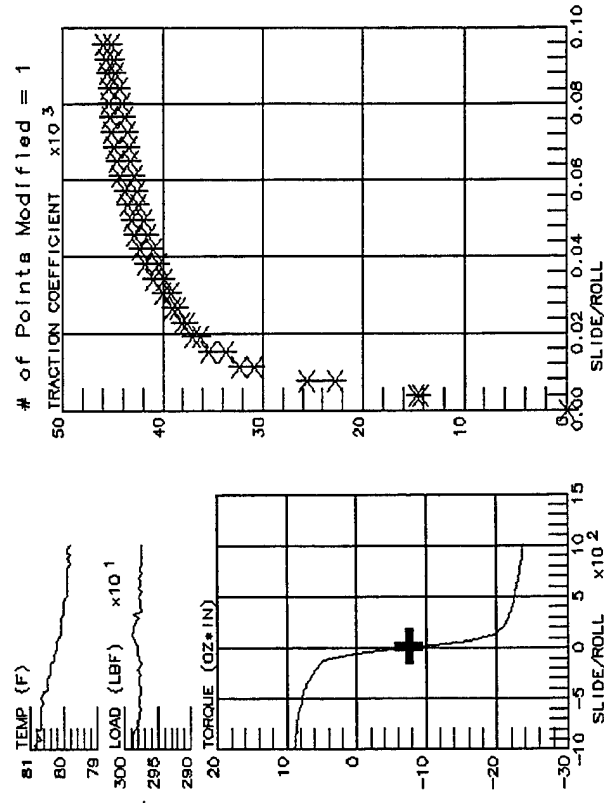
CC 89-180 Vistalube 7 #145
80F 4LBF 1260RPM 26 FILE: v1st-07



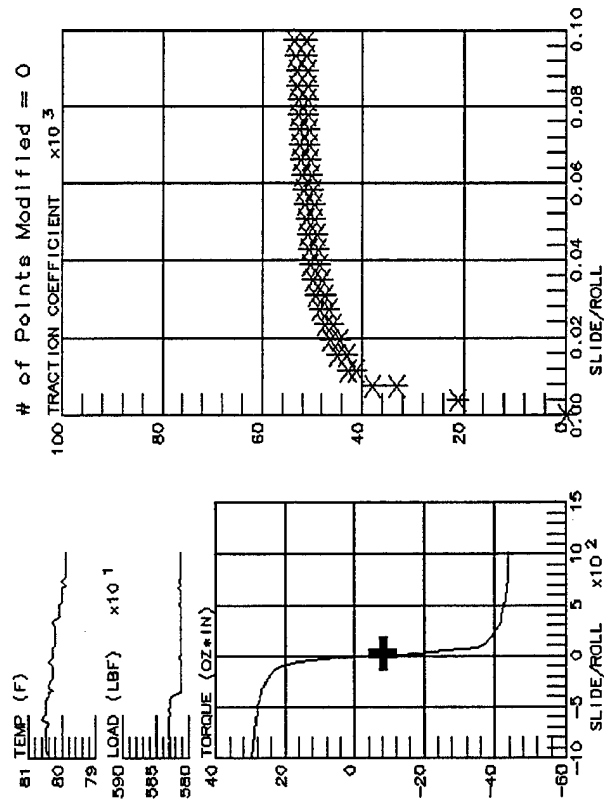
CC 89-180 Vistalube 7 #148
80F 13LBF 1260RPM 27 FILE: v1st-07



CC 89-180 Vistalube 7 #147
80F 30LBF 1260RPM 28 FILE: v1st-07



CC 89-180 Vistalube 7 #148
80F 58LBF 1260RPM 29 FILE: v1st-07

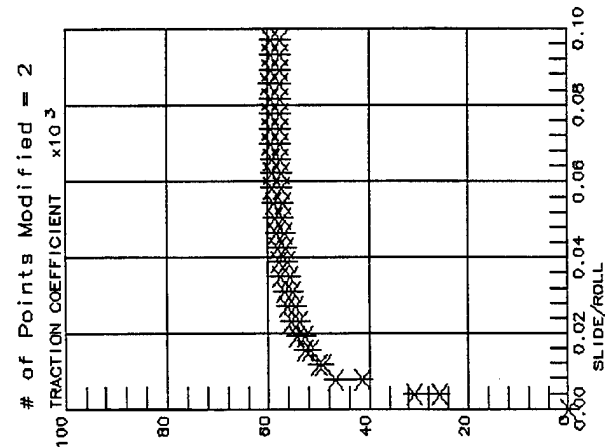
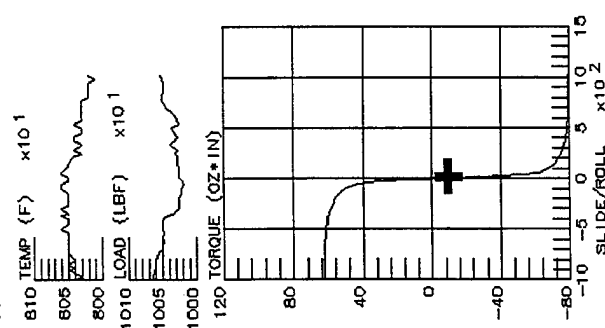


CC 89-180 Vistalube 7
80F 100LBF 1260RPM 30 FILE: v1st-07

#149

of Points Modified = 2

TRACTION COEFFICIENT $\times 10^3$

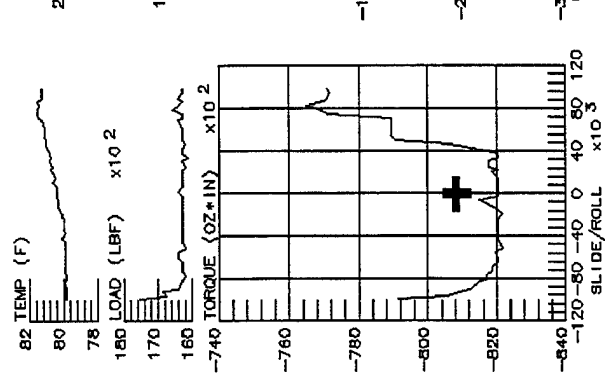
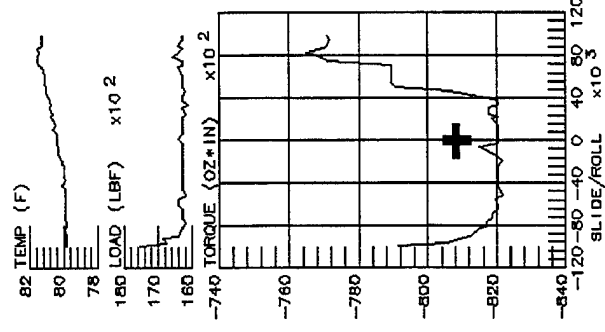


CC 89-180 Vistalube 7
80F 2LBF 2559RPM 31 FILE: v1st-07

#150

of Points Modified = 3

TRACTION COEFFICIENT $\times 10^3$

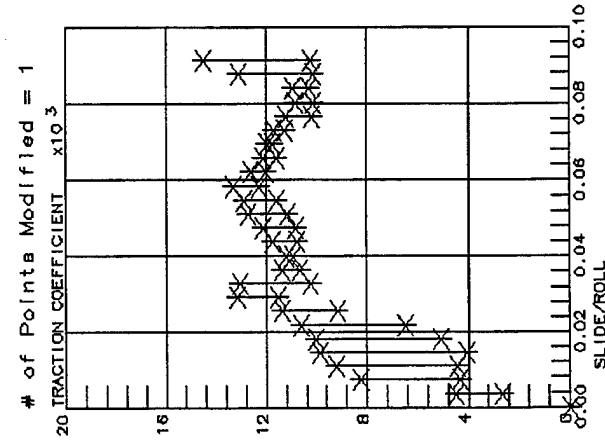
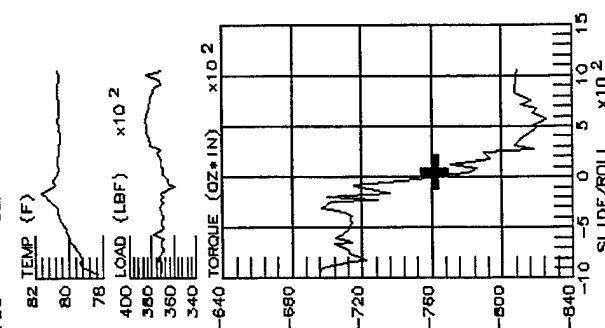


CC 89-180 Vistalube 7
80F 4LBF 2559RPM 32 FILE: v1st-07

#151

of Points Modified = 1

TRACTION COEFFICIENT $\times 10^3$

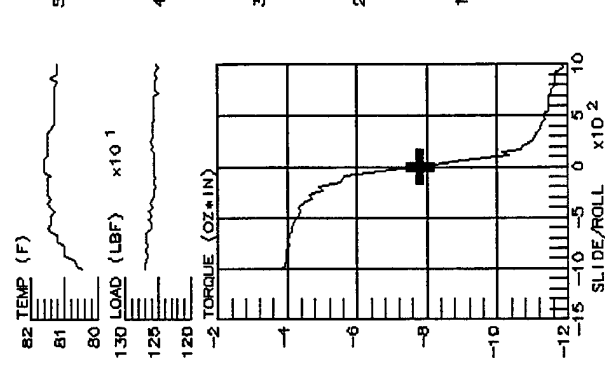
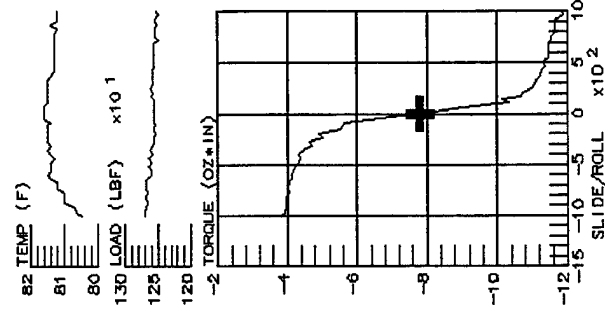


CC 89-180 Vistalube 7
80F 13LBF 2559RPM 33 FILE: v1st-07

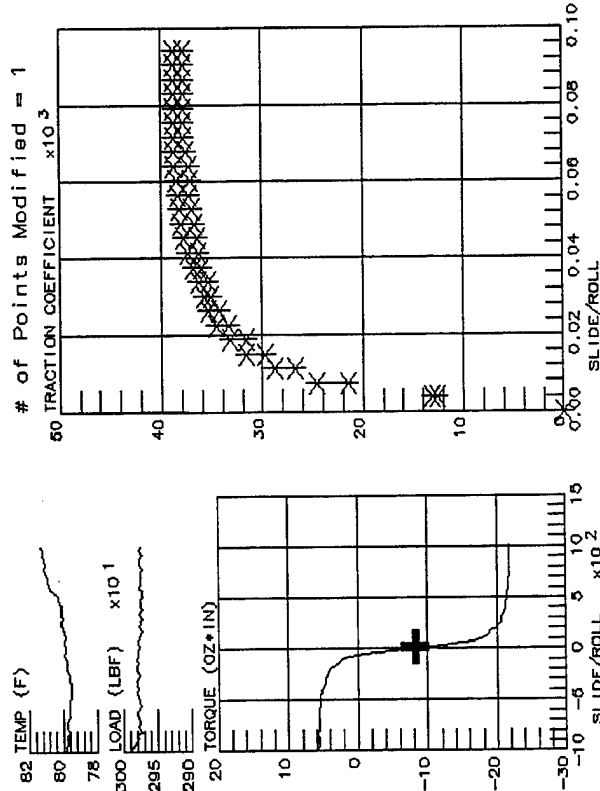
#152

of Points Modified = 1

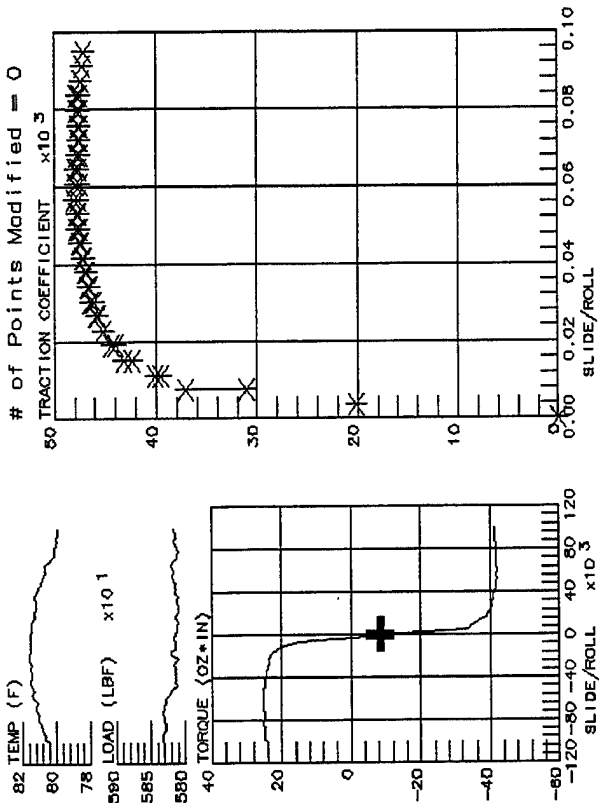
TRACTION COEFFICIENT $\times 10^3$



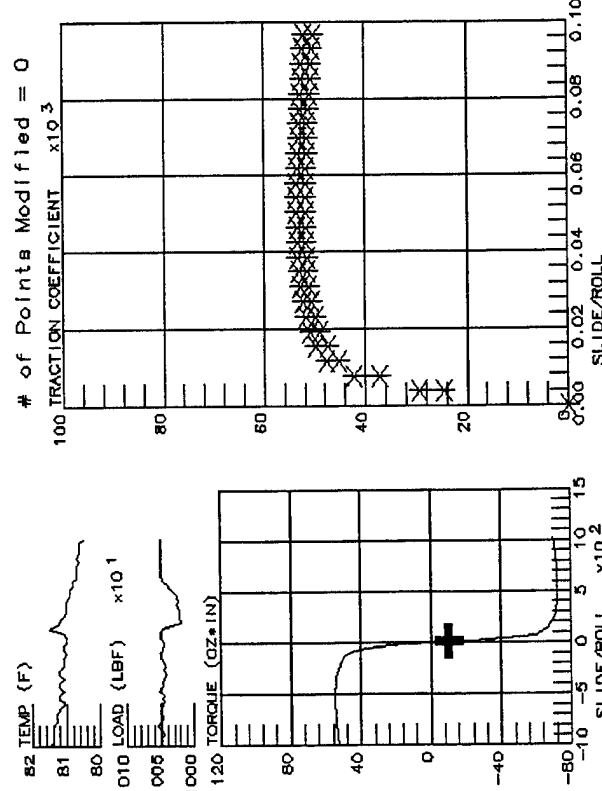
CC 89-180 Vistalube 7
80F 30LBF 2559RPM 34 FILE: v1st-07 #153



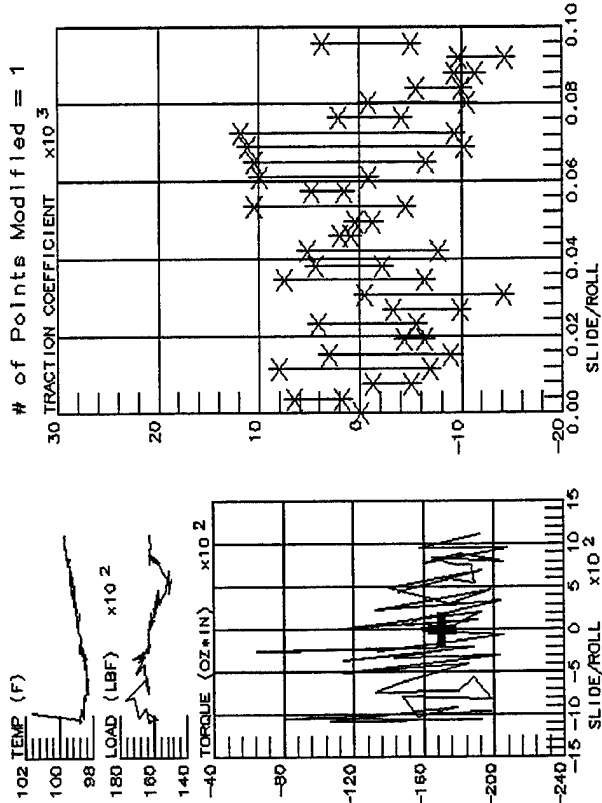
CC 89-180 Vistalube 7
80F 68LBF 2559RPM 35 FILE: v1st-07 #154

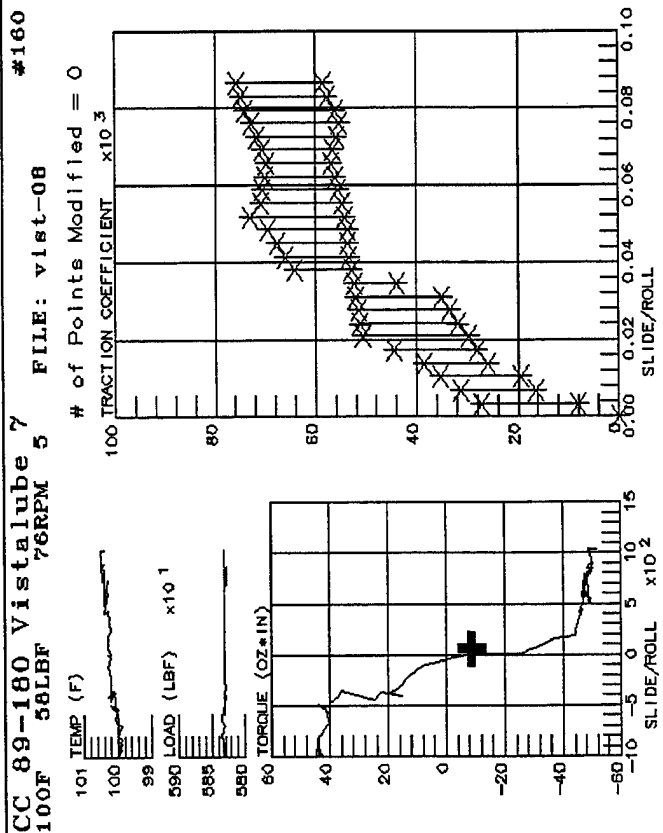
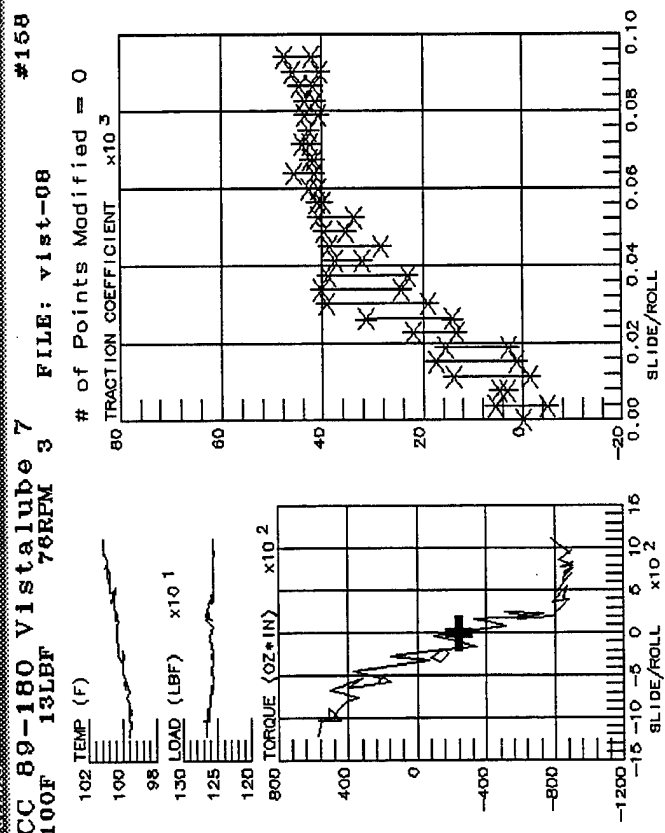
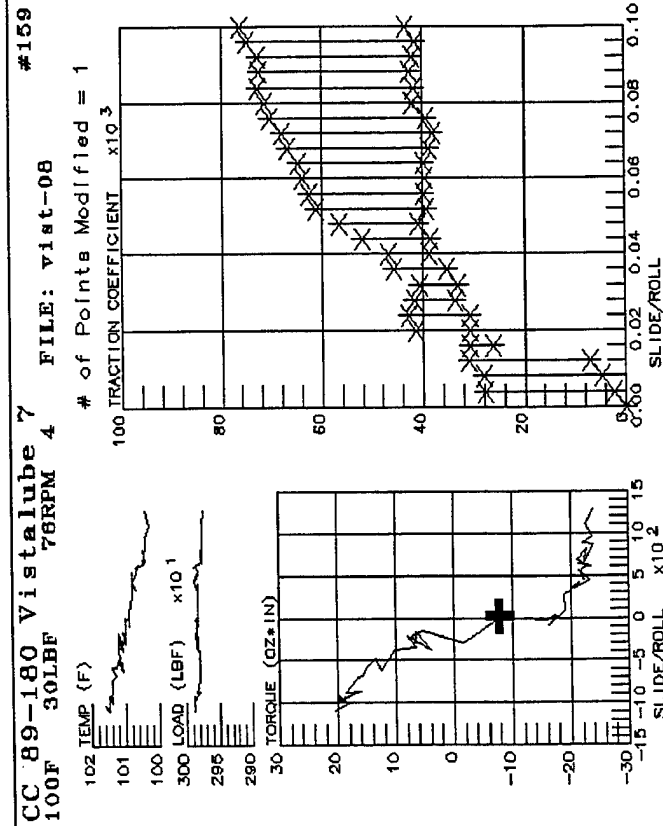
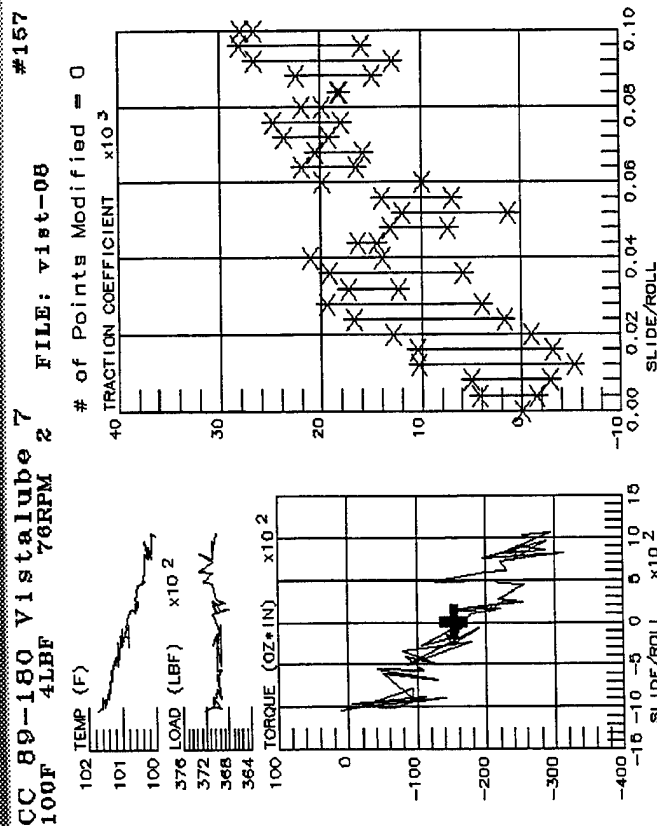


CC 89-180 Vistalube 7
80F 100LBF 2559RPM 36 FILE: v1st-07 #155

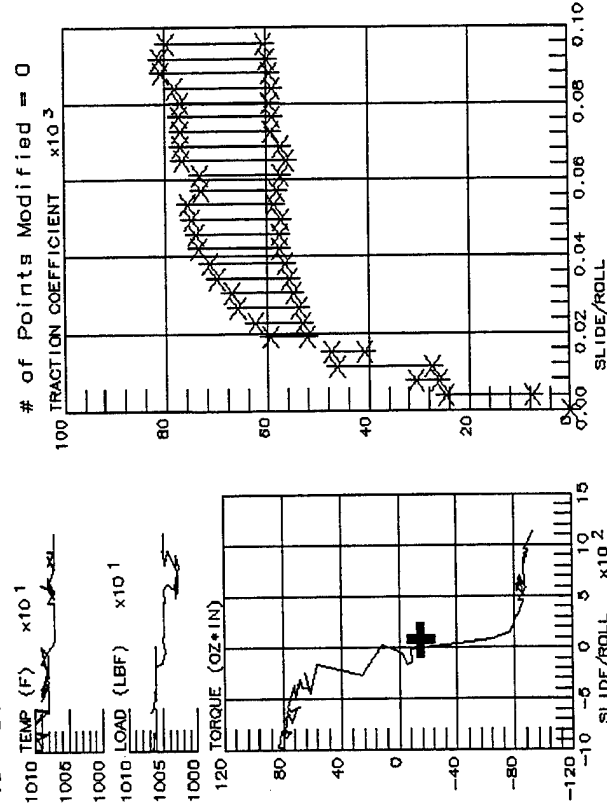


CC 89-180 Vistalube 7
100F 2LBF 76RPM 1 FILE: v1st-08 #156

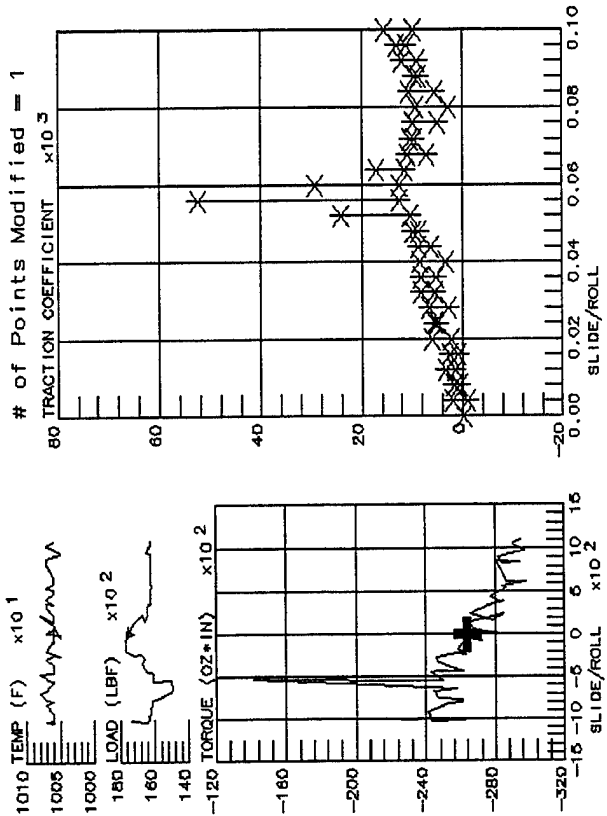




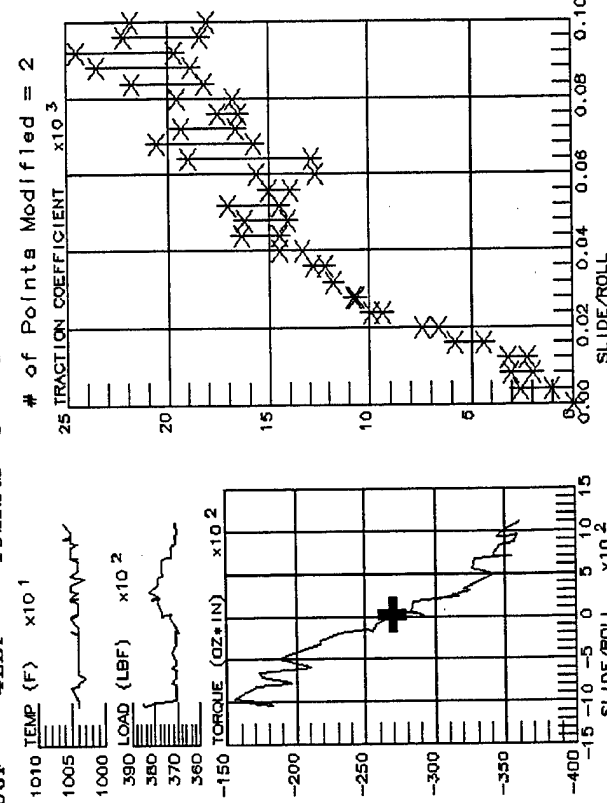
CC 89-180 Vistalube 7 #161
100F 100LBF 76RPM 6 FILE: v1st-08



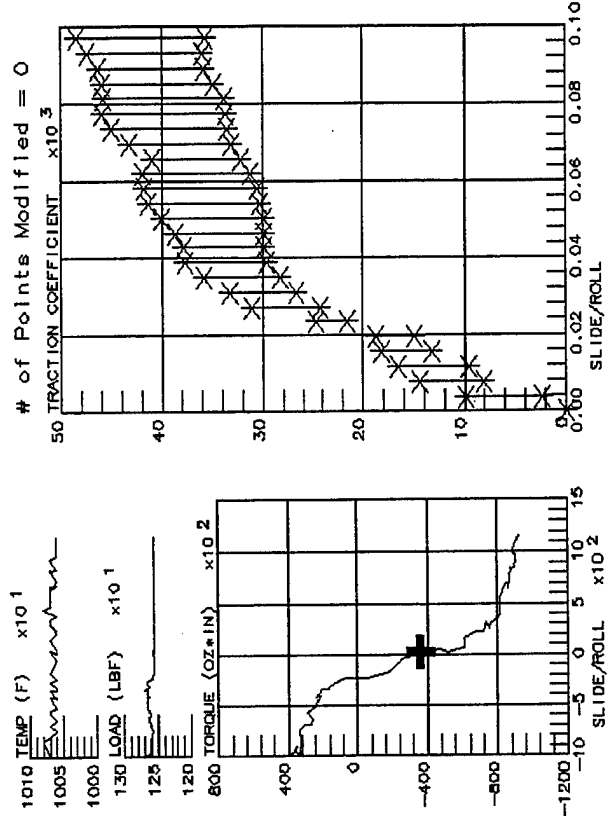
CC 89-180 Vistalube 7 #162
100F 2LBF 152RPM 7 FILE: v1st-08

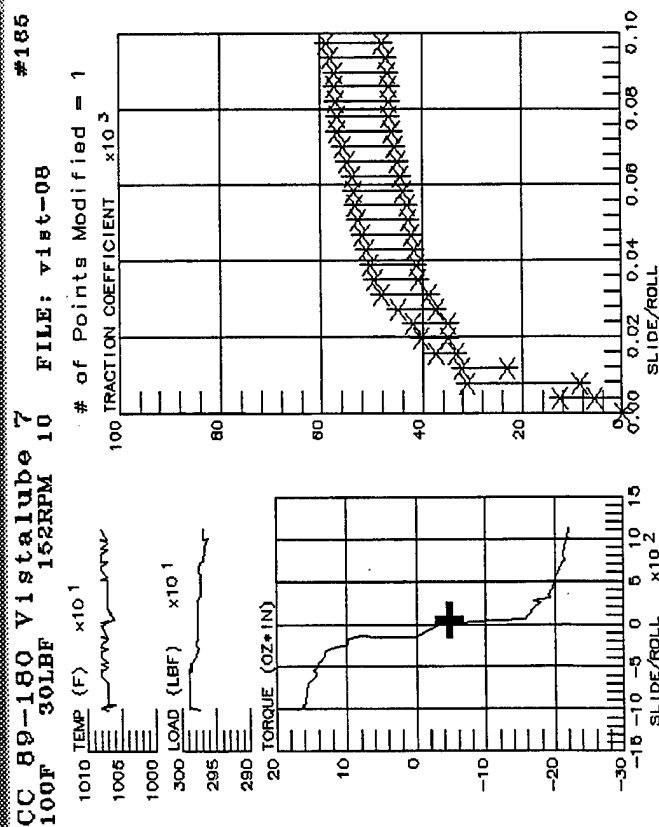


CC 89-180 Vistalube 7 #163
100F 4LBF 152RPM 8 FILE: v1st-08



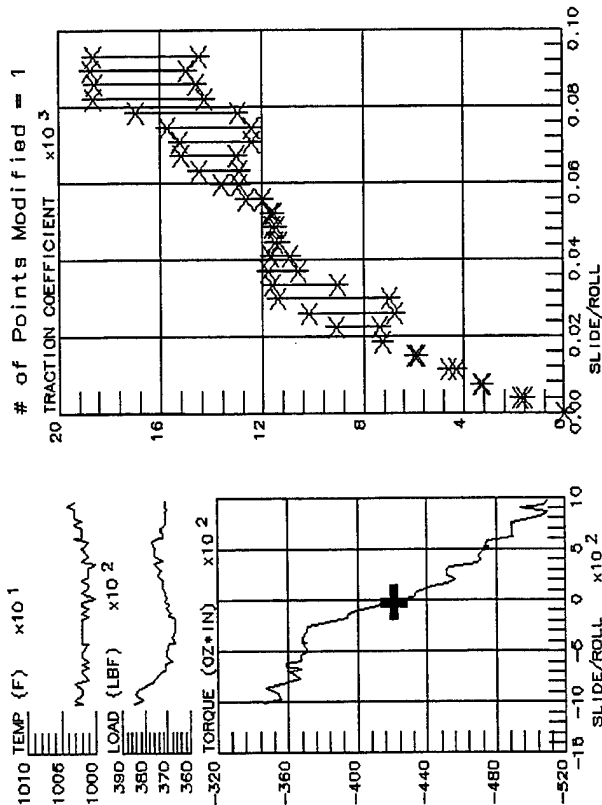
CC 89-180 Vistalube 7 #164
100F 13LBF 152RPM 9 FILE: v1st-08



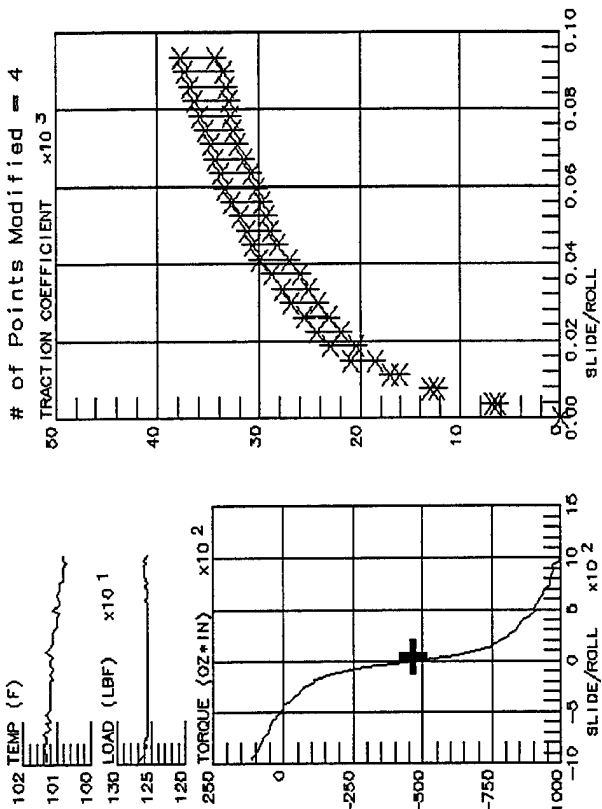


TRACTION MEASUREMENTS

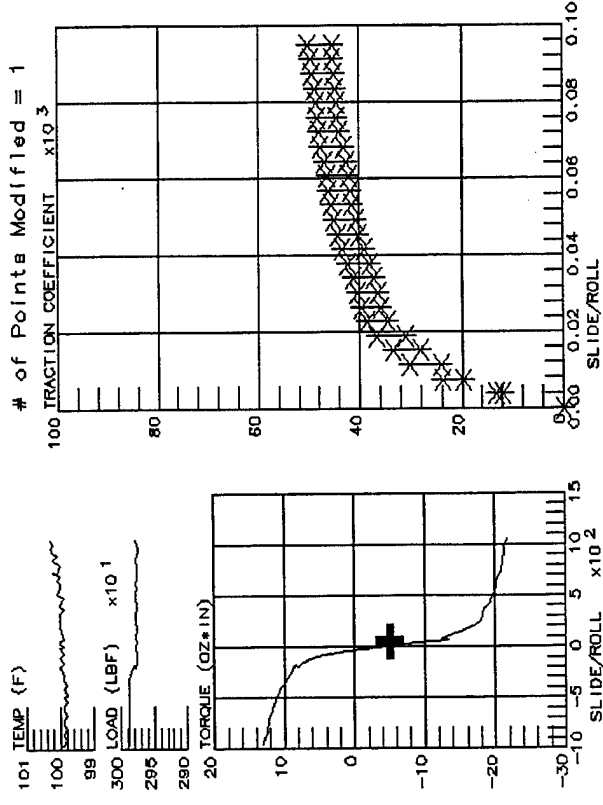
CC 89-180 Vistalube 7 #189
100F 4LBF 343RPM 14 FILE: v1st-08



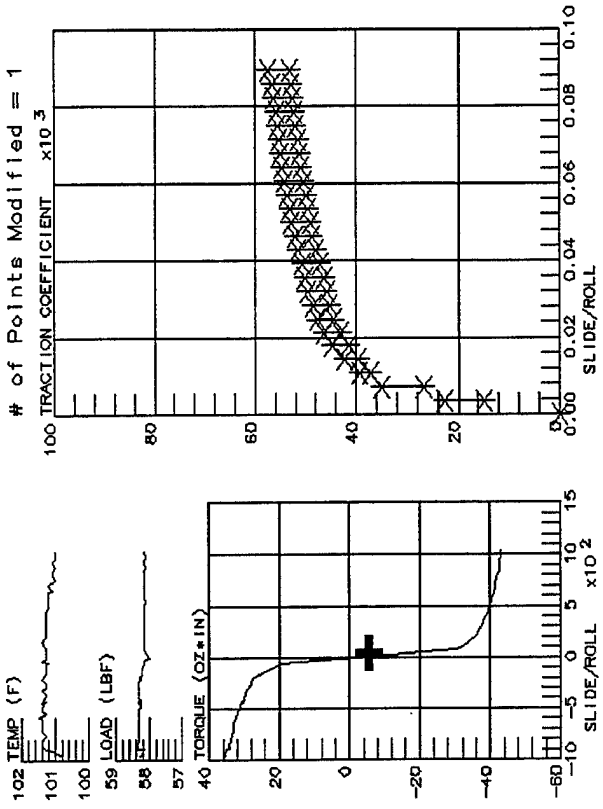
CC 89-180 Vistalube 7 #170
100F 13LBF 343RPM 15 FILE: v1st-08

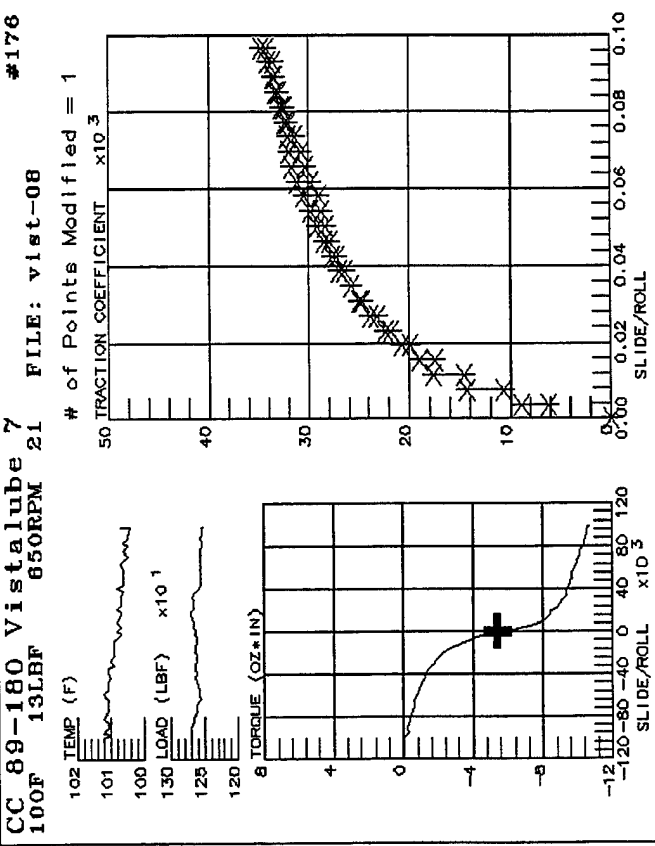
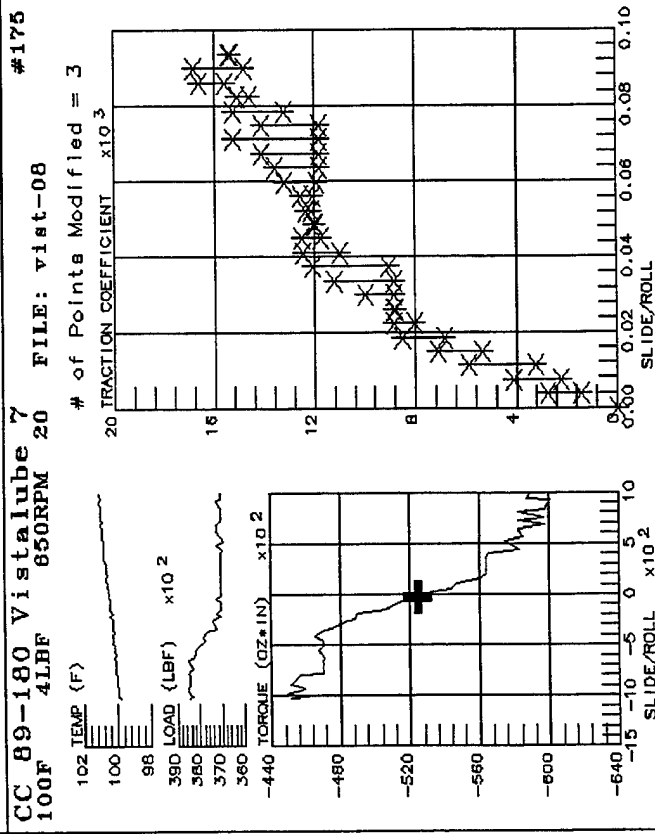
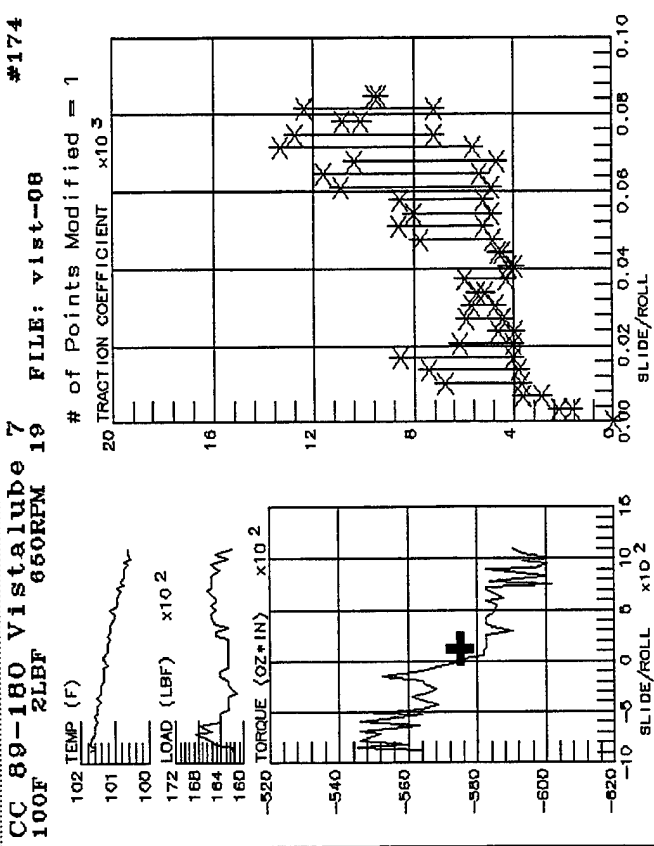
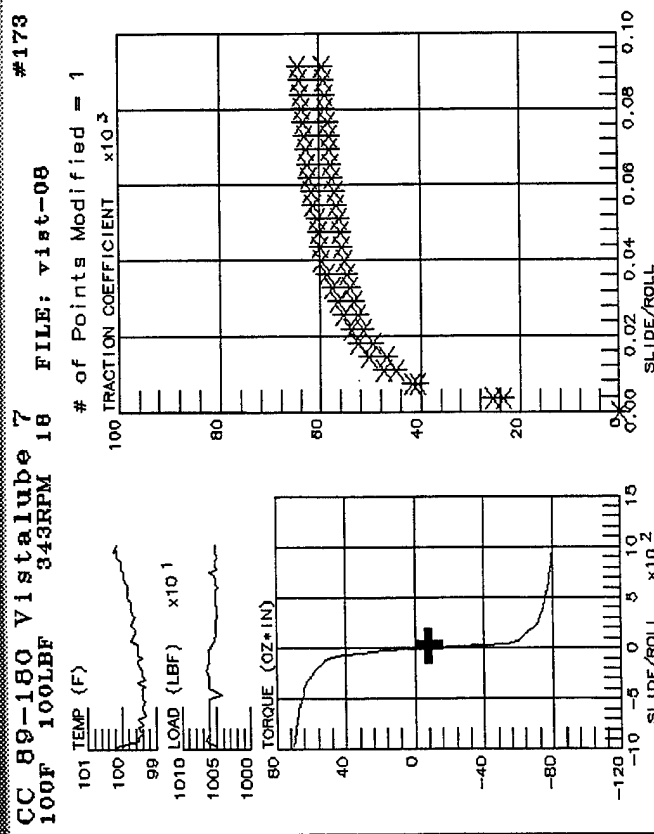


CC 89-180 Vistalube 7 #171
100F 30LBF 343RPM 16 FILE: v1st-08

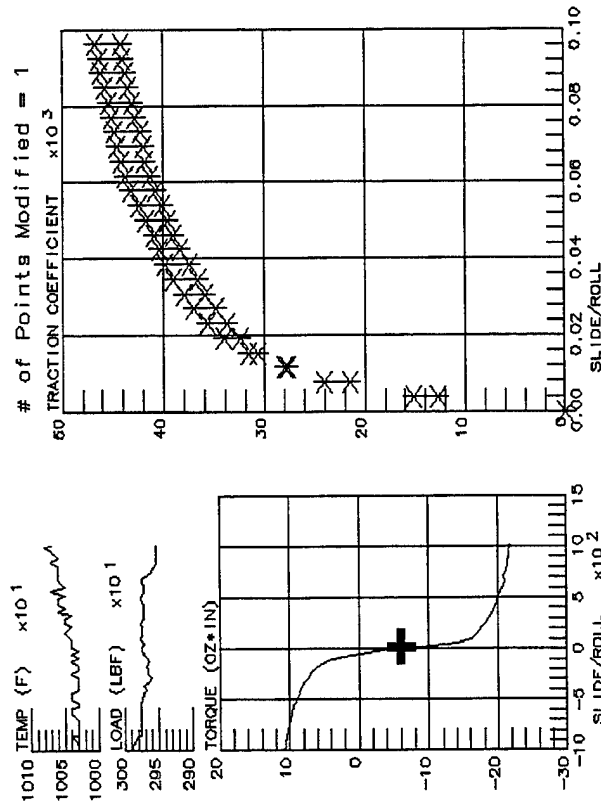


CC 89-180 Vistalube 7 #172
100F 58LBF 343RPM 17 FILE: v1st-08

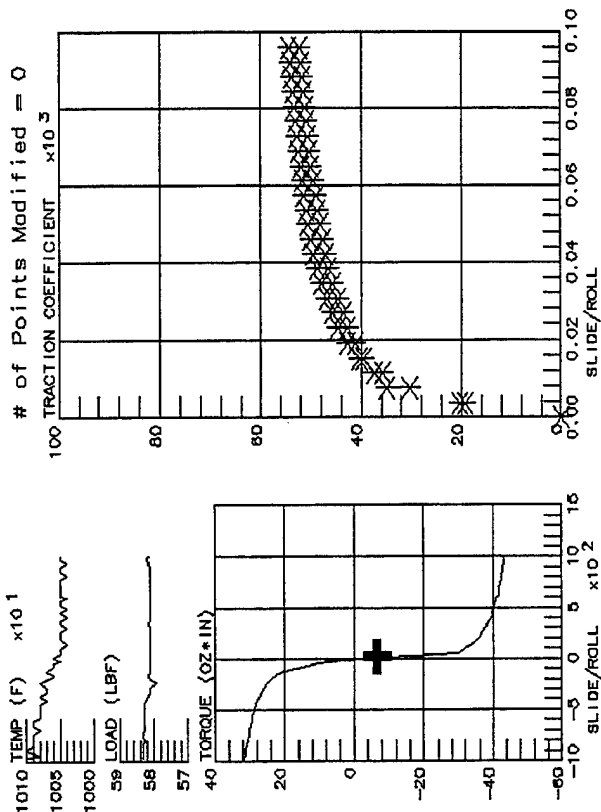




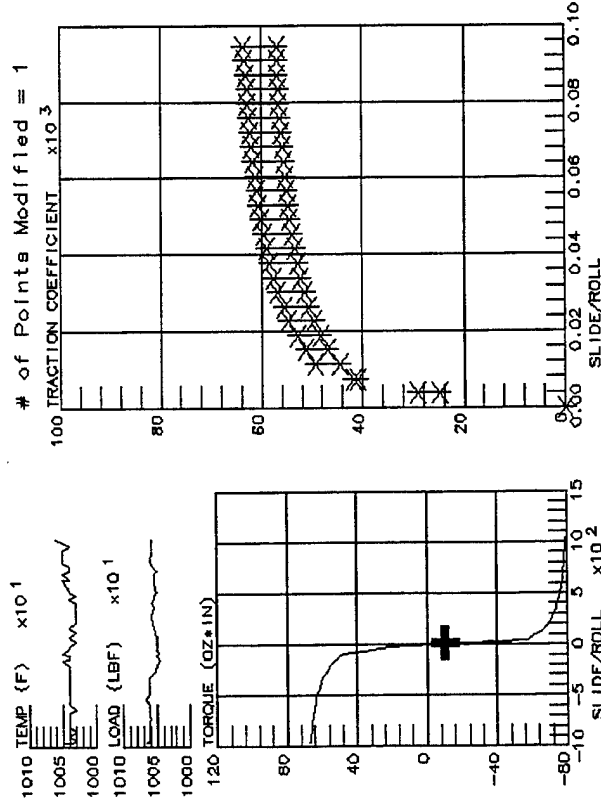
CC 89-180 Vistalube 7
100F 30LBF 650RPM 22 FILE: v1st-08 #177



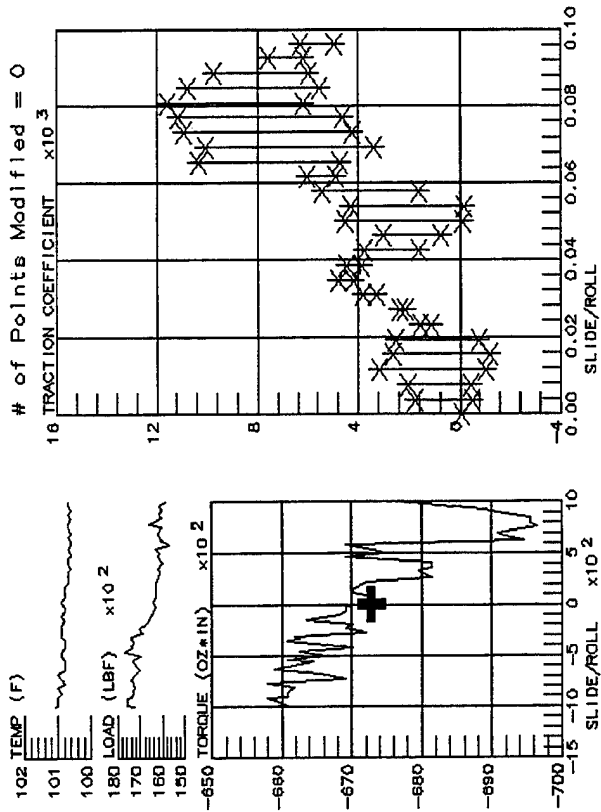
CC 89-180 Vistalube 7
100F 58LBF 650RPM 23 FILE: v1st-08 #178



CC 89-180 Vistalube 7
100F 100LBF 650RPM 24 FILE: v1st-08 #179

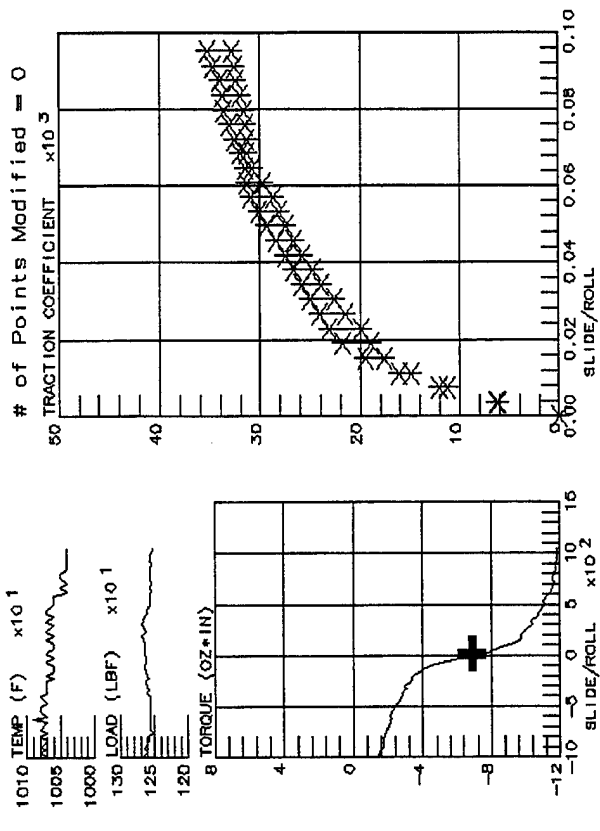
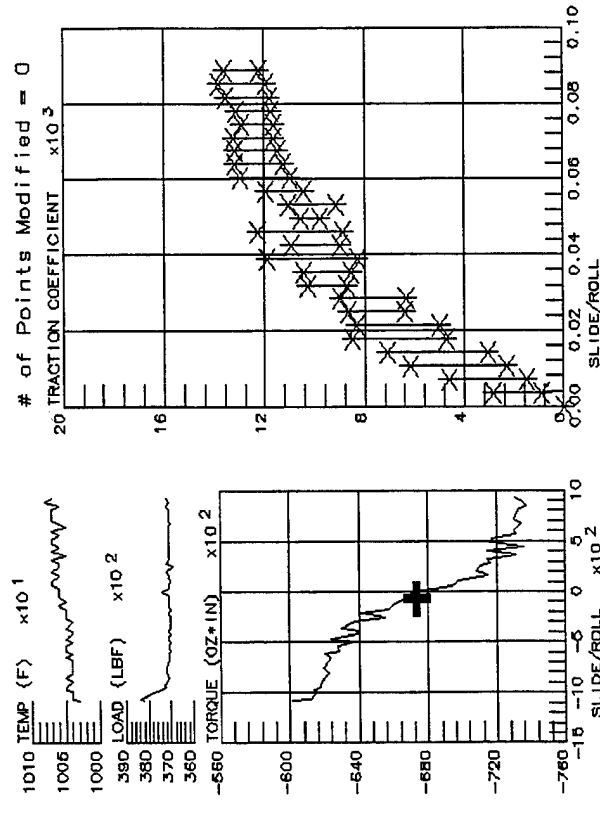


CC 89-180 Vistalube 7
100F 2LBF 1280RPM 25 FILE: v1st-08 #180



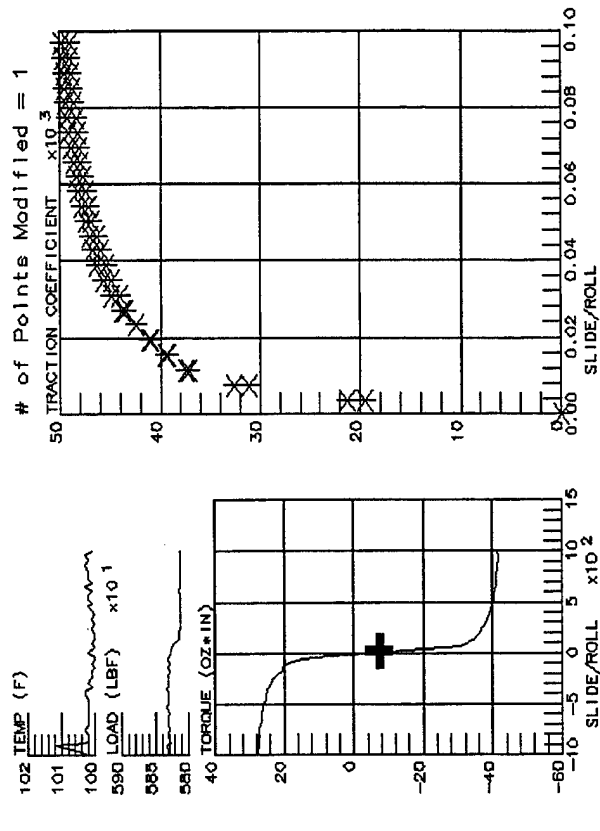
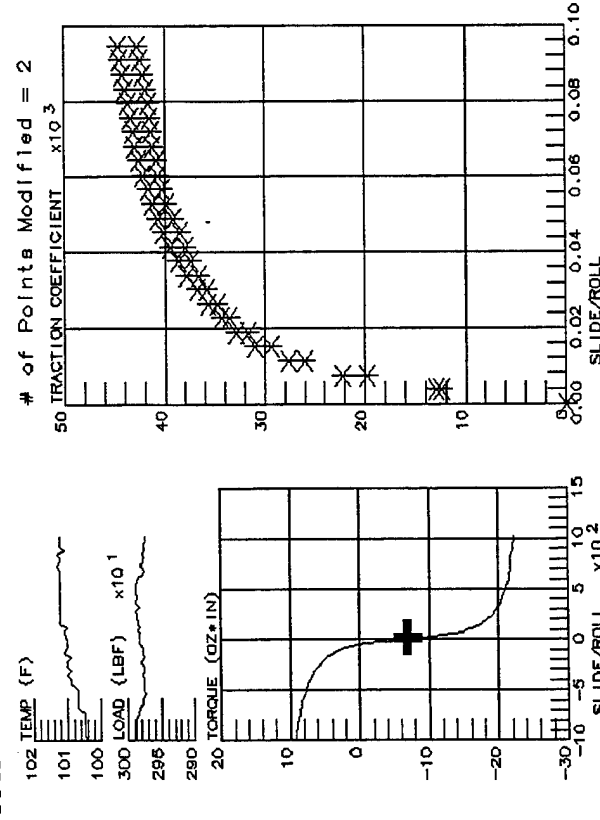
CC 89-180 Vistalube 7
100F 4LBF 1260RPM 26 FILE: v1st-08

#181
of Points Modified = 0

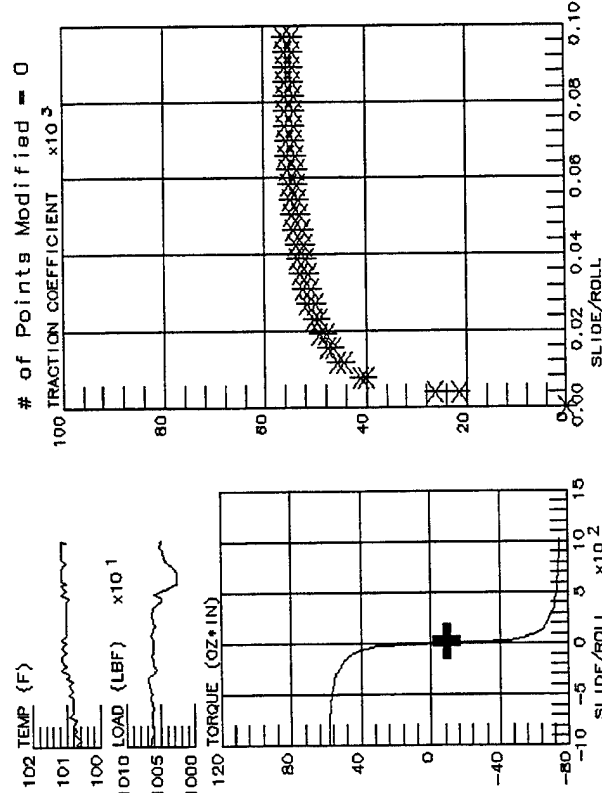


CC 89-180 Vistalube 7
100F 30LBF 1260RPM 28 FILE: v1st-08

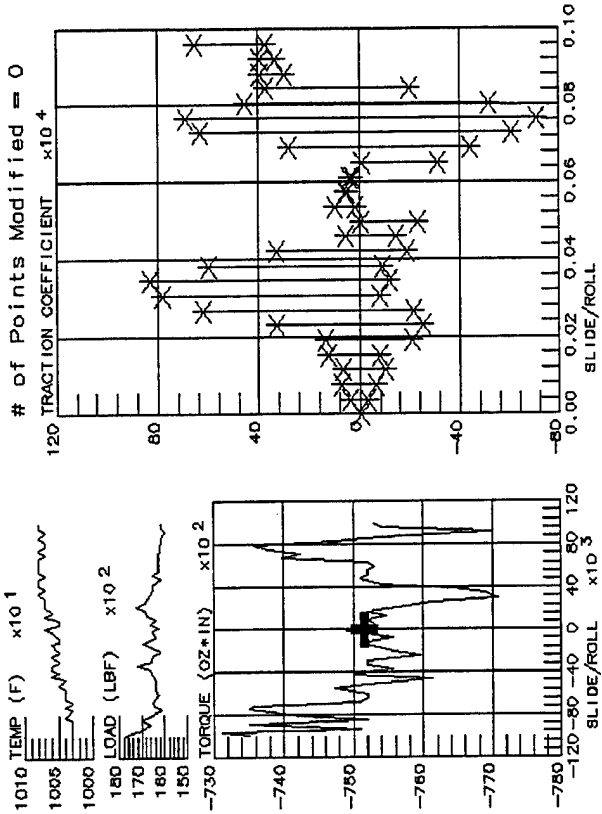
#183
of Points Modified = 2



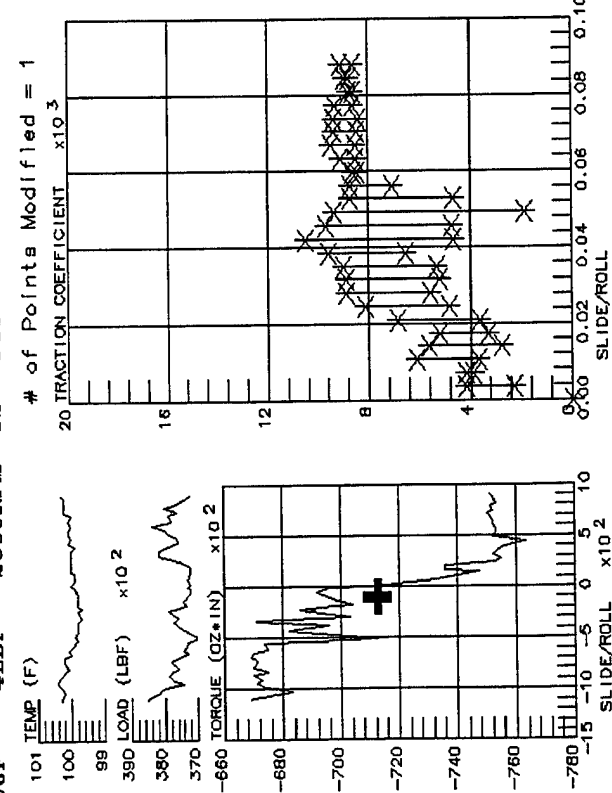
CC 89-180 Vistalube 7
100F 100LBF 1250RPM 30 FILE: v1st-08 #186



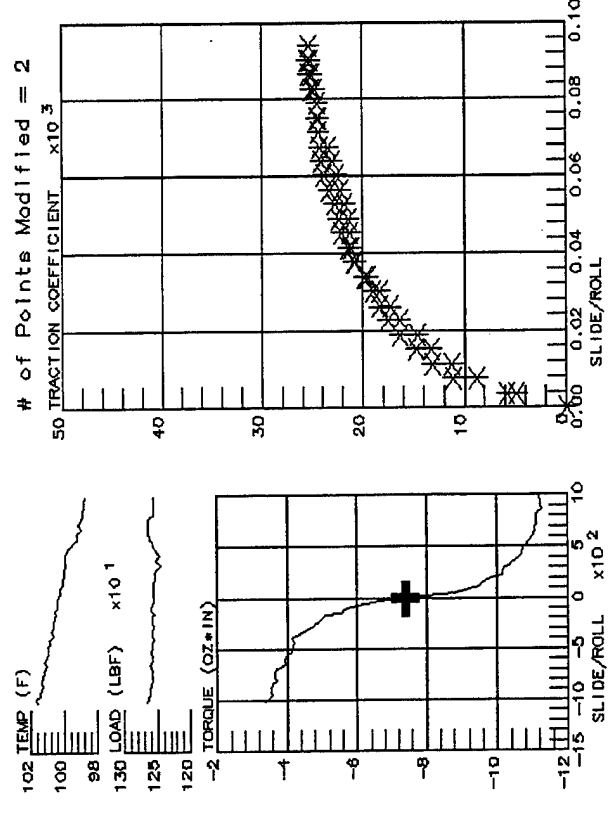
CC 89-180 Vistalube 7
100F 2LBF 2559RPM 31 FILE: v1st-08 #186

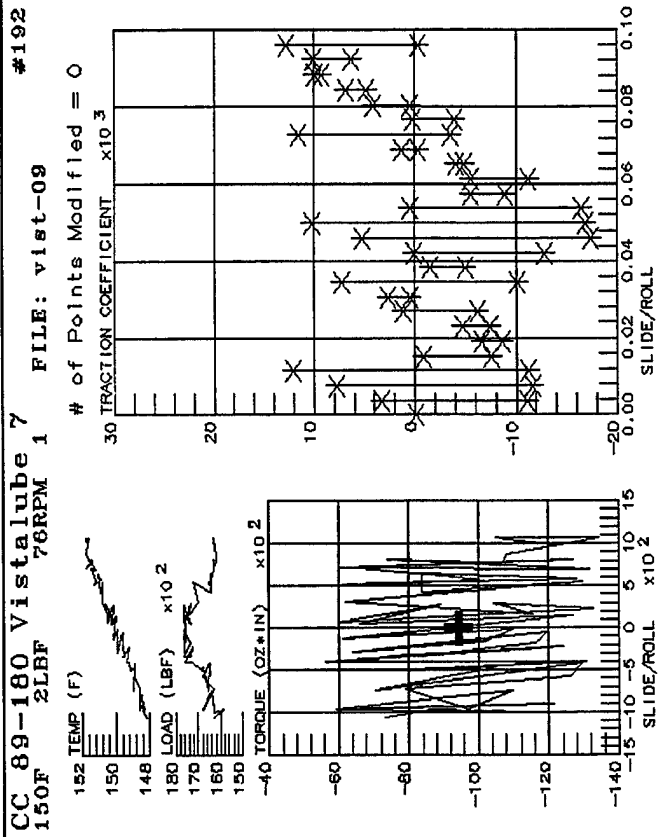
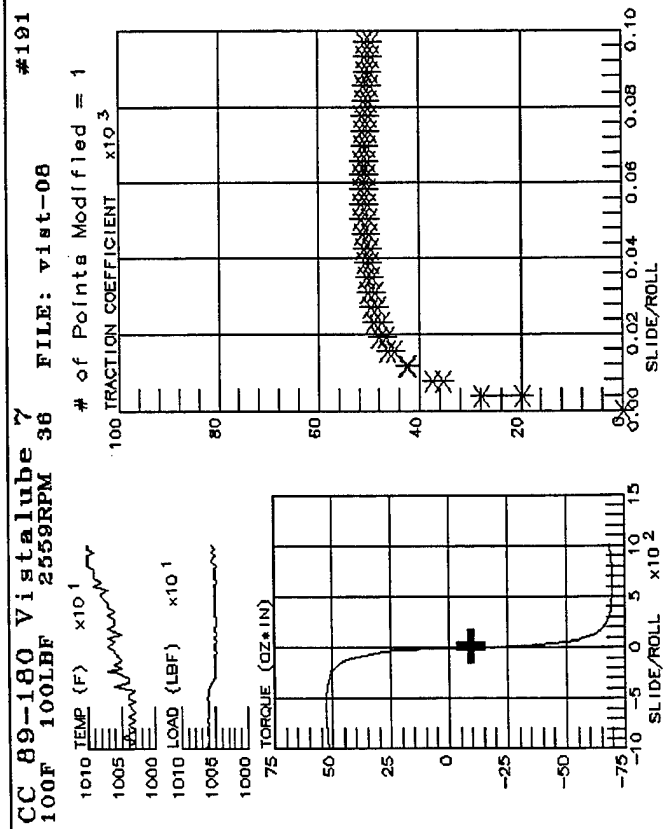
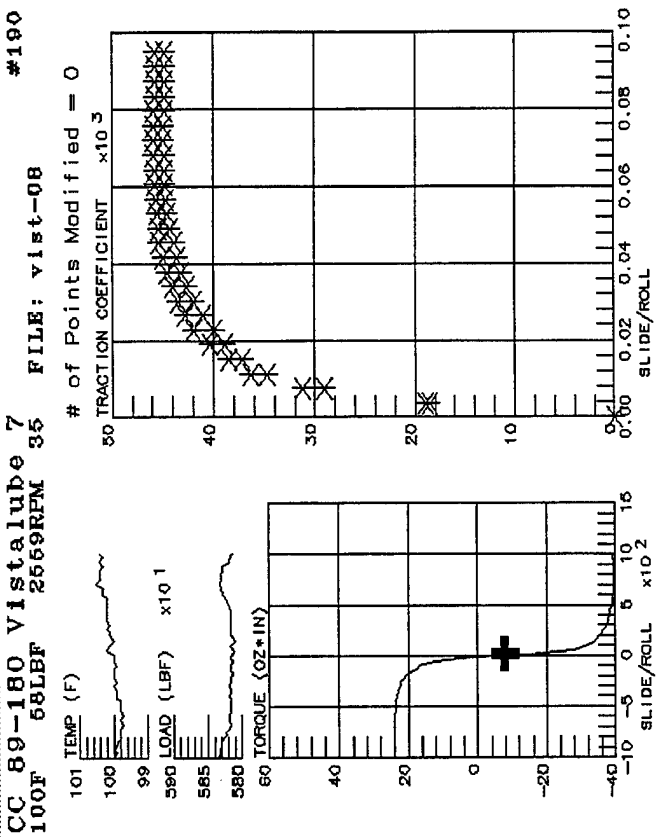
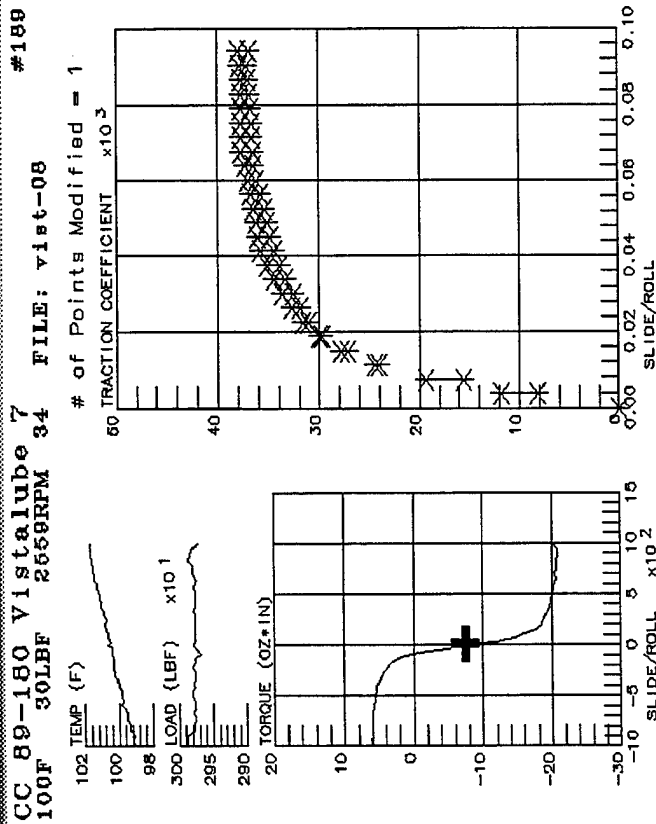


CC 89-180 Vistalube 7
100F 4LBF 2559RPM 32 FILE: v1st-08 #187



CC 89-180 Vistalube 7
100F 13LBF 2559RPM 33 FILE: v1st-08 #188

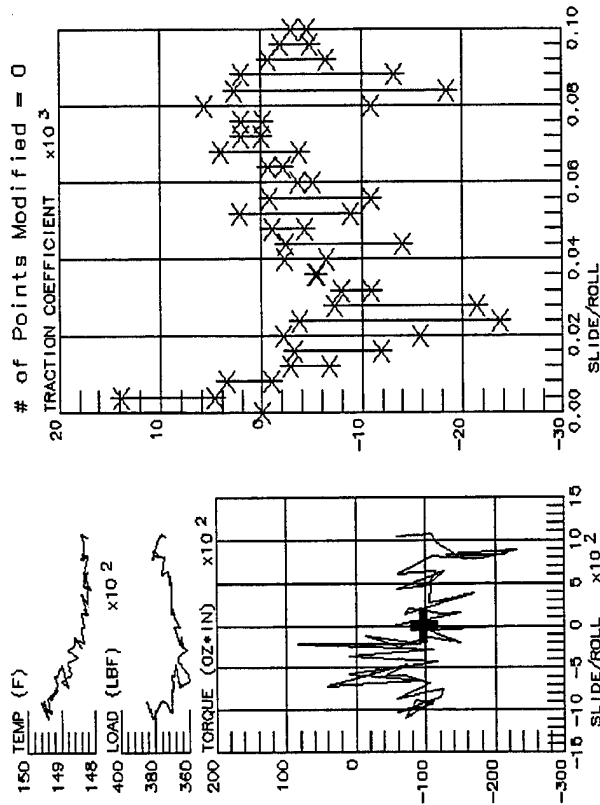




CC 89-180 Vistalube 7
150F 4LBF 76RPM 2 FILE: v1st-09

#193

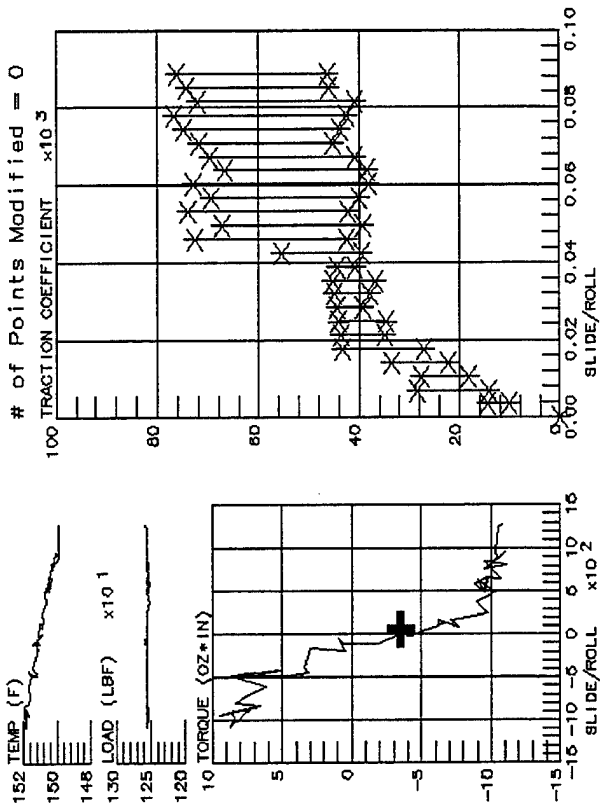
of Points Modified = 0



CC 89-180 Vistalube 7
160F 13LBF 76RPM 3 FILE: v1st-09

#194

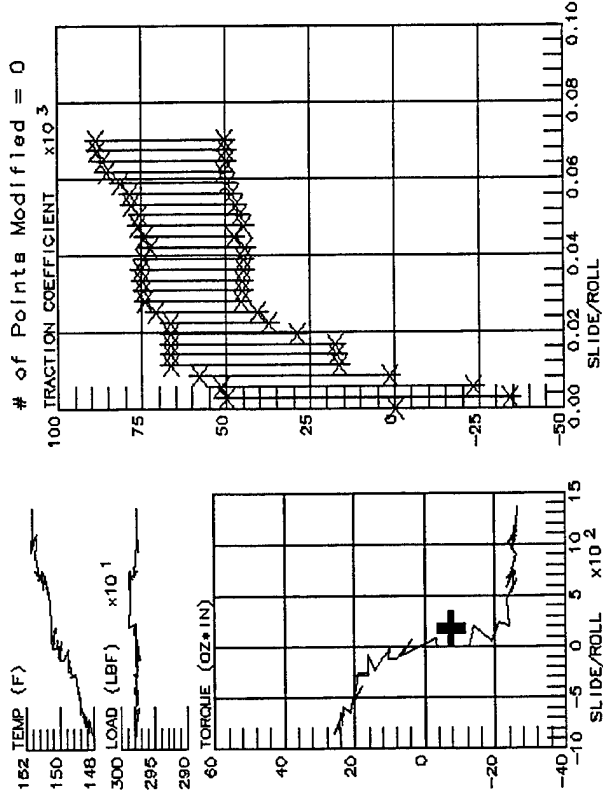
of Points Modified = 0



CC 89-180 Vistalube 7
150F 30LBF 76RPM 4 FILE: v1st-09

#195

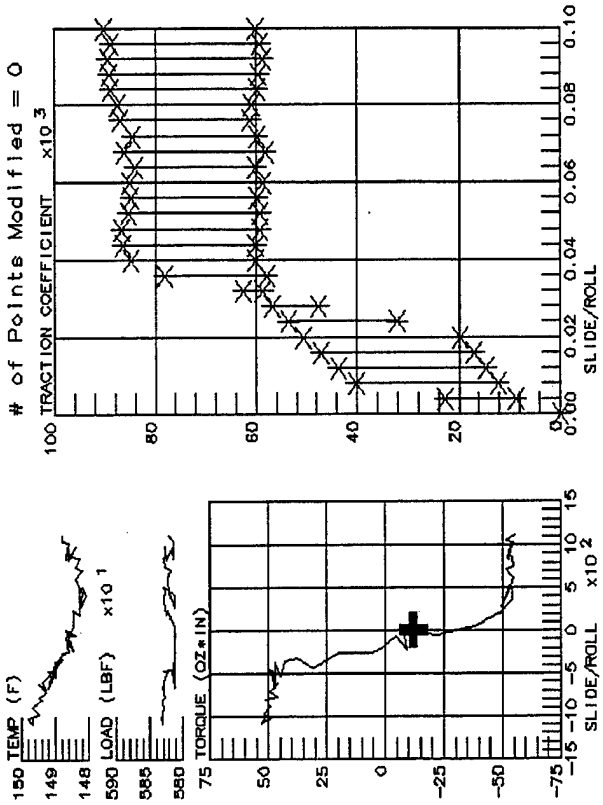
of Points Modified = 0



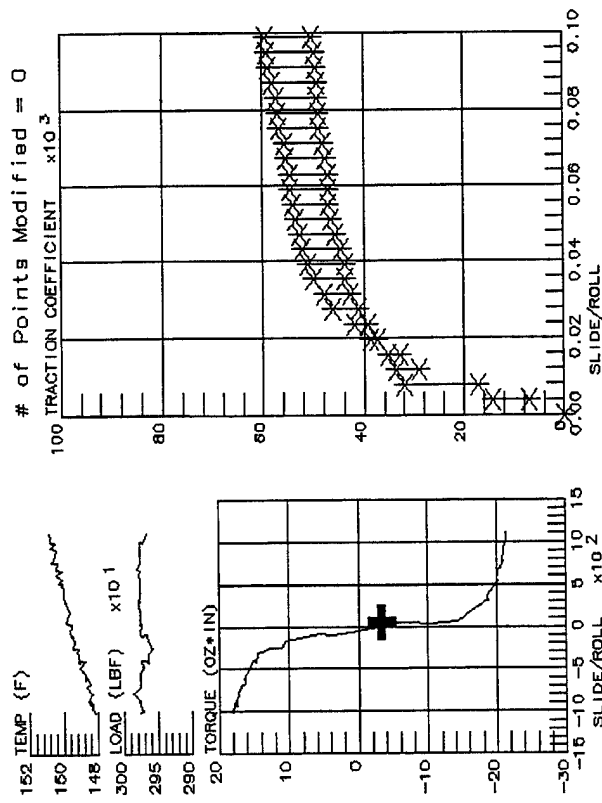
CC 89-180 Vistalube 7
150F 58LBF 76RPM 5 FILE: v1st-09

#196

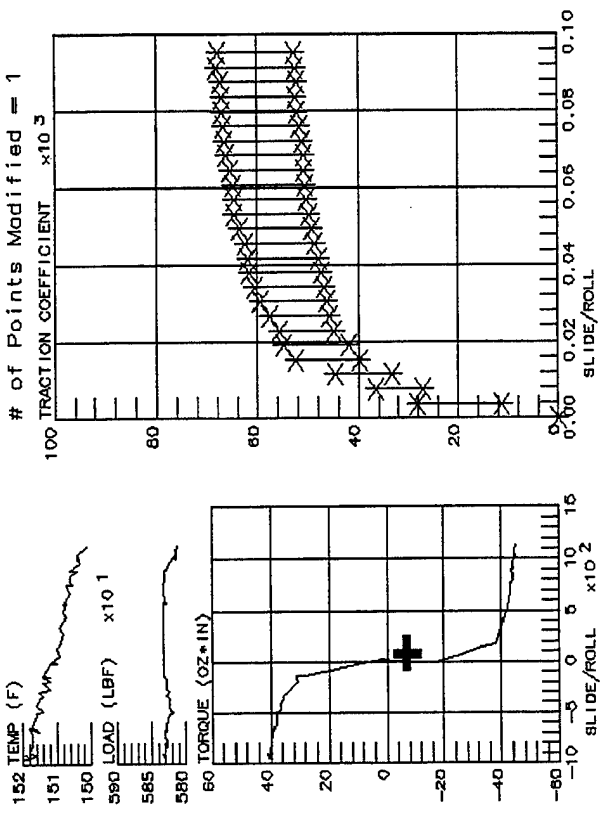
of Points Modified = 0



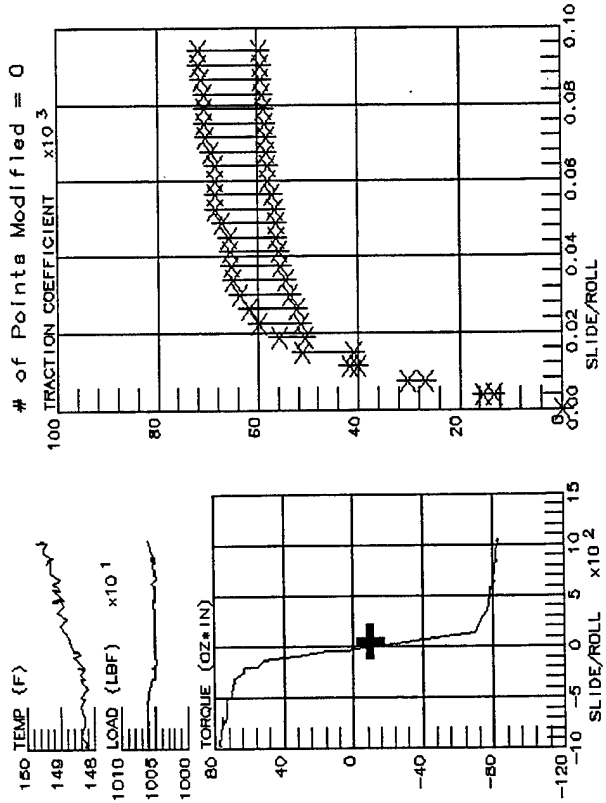
CC 89-180 Vistalube 7 #201
150F 30LBF 152RPM 10 FILE: v1st-09
of Points Modified = 0



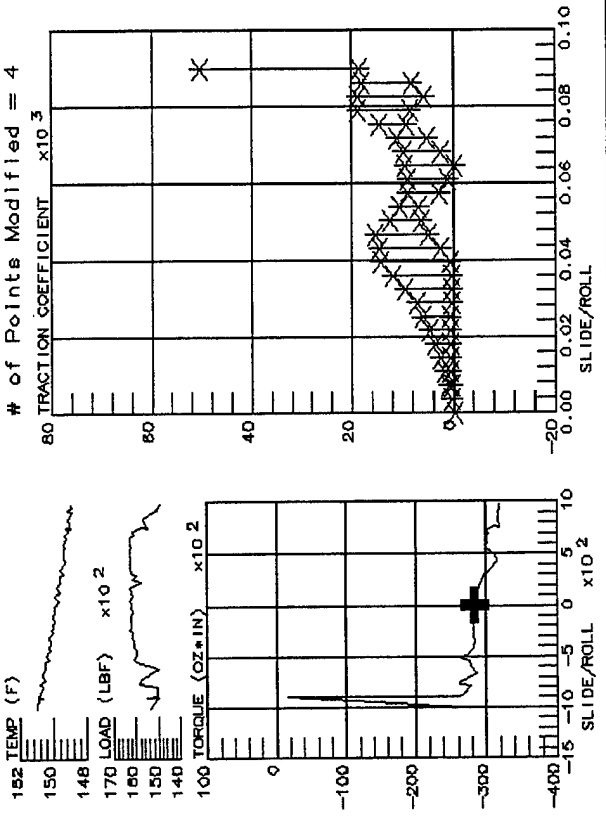
CC 89-180 Vistalube 7 #202
150F 58LBF 162RPM 11 FILE: v1st-09
of Points Modified = 1

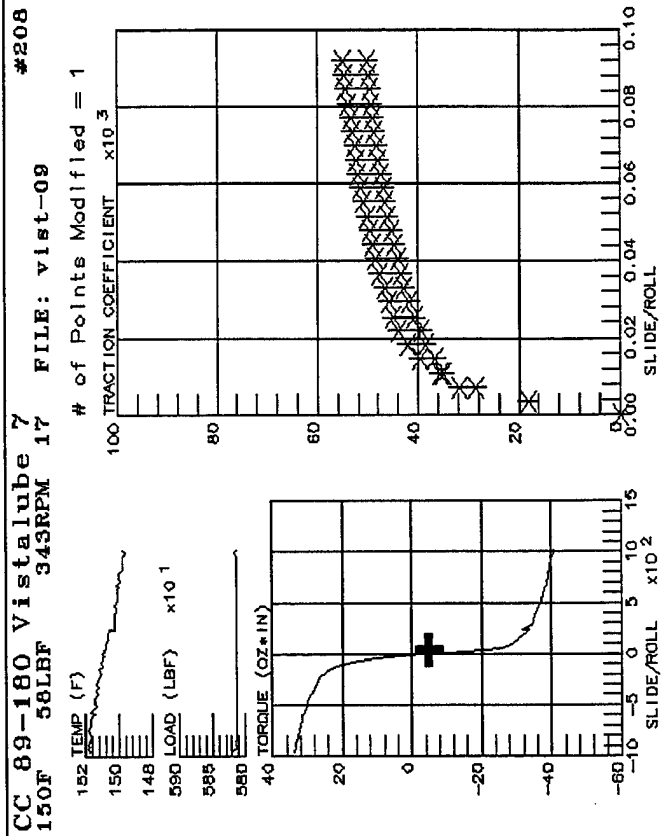
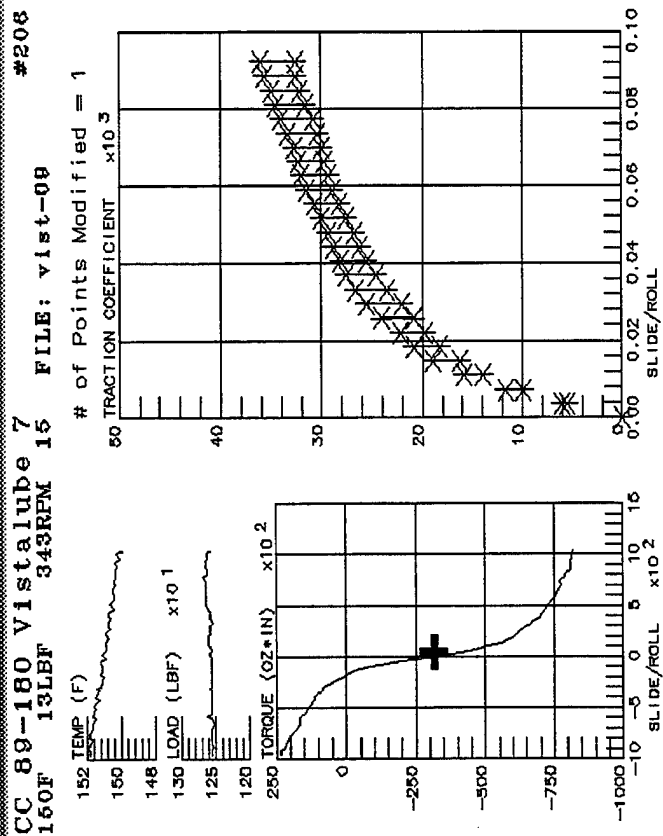
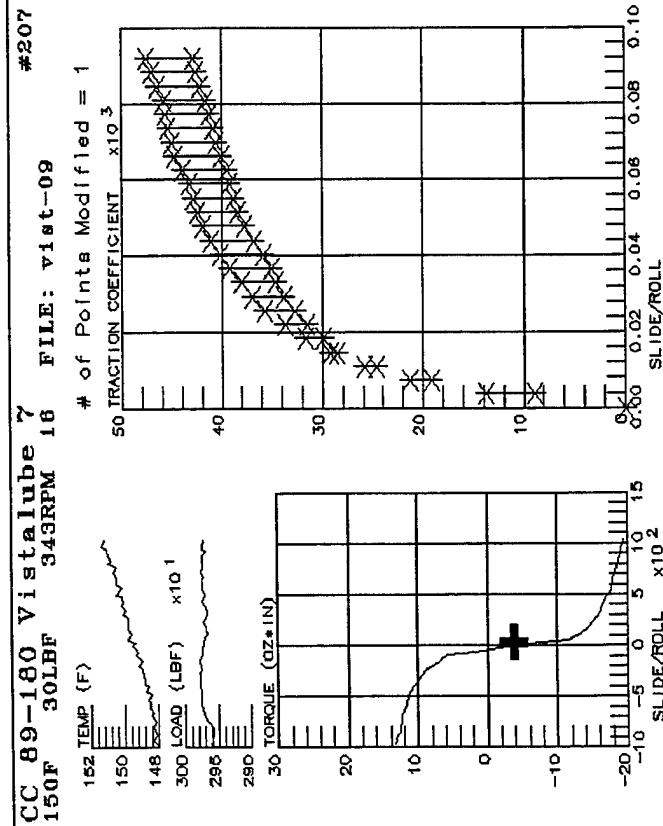
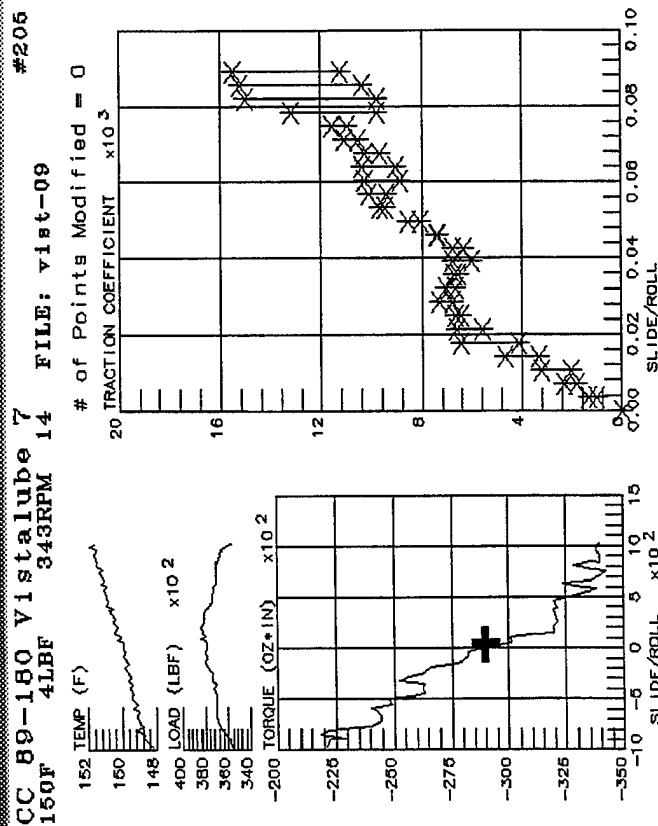


CC 89-180 Vistalube 7 #203
150F 100LBF 152RPM 12 FILE: v1st-09
of Points Modified = 0



CC 89-180 Vistalube 7 #204
150F 2LBF 343RPM 13 FILE: v1st-09
of Points Modified = 4

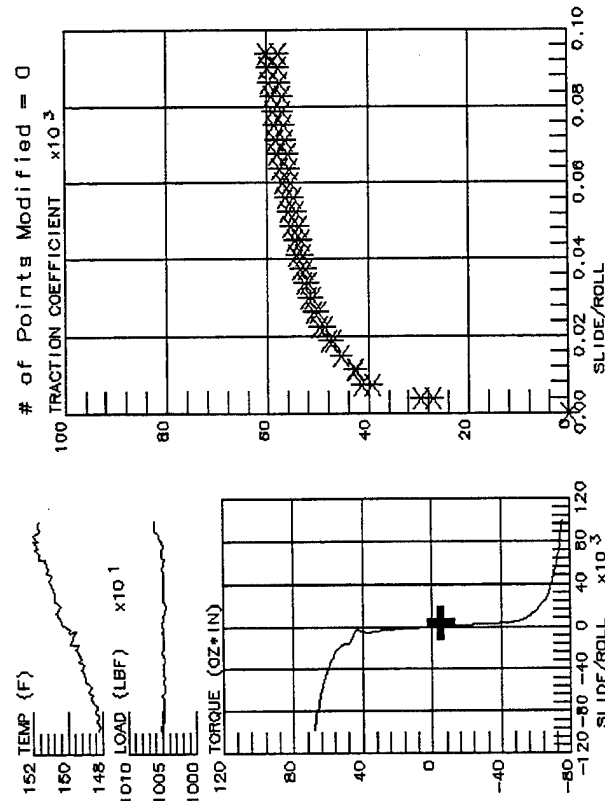




91114864 40113504

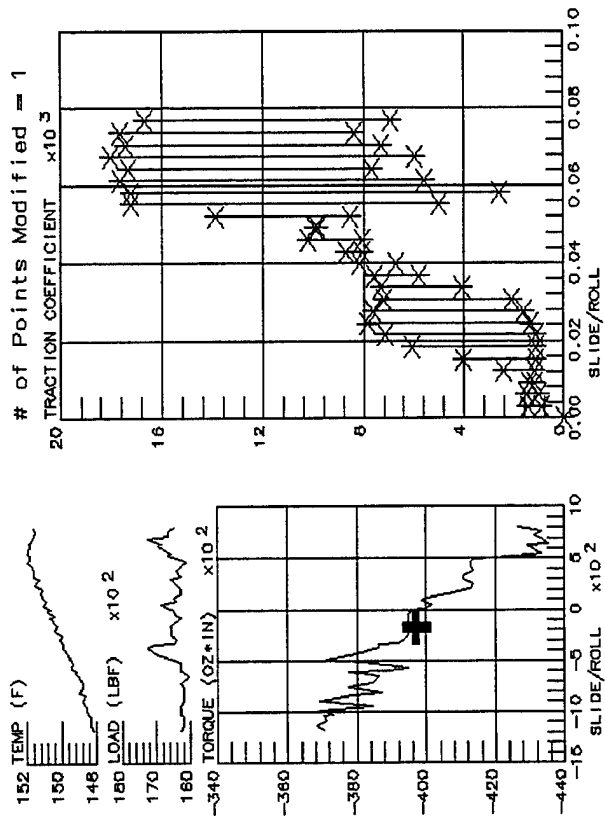
CC 89-180 V1stalube 7
150F 100LBF 343RPM 18 FILE: v1st-09 #209

of Points Modified = 0



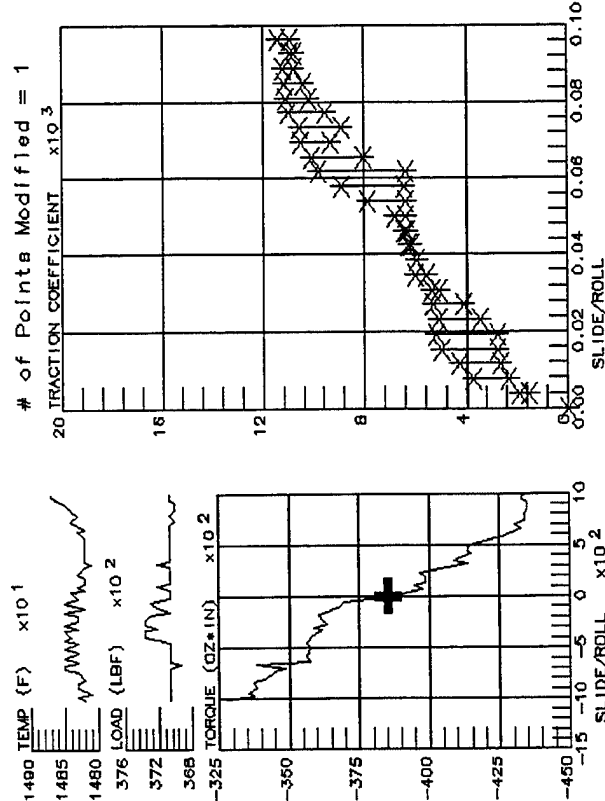
CC 89-180 V1stalube 7
160F 2LBF 650RPM 19 FILE: v1st-09 #210

of Points Modified = 1



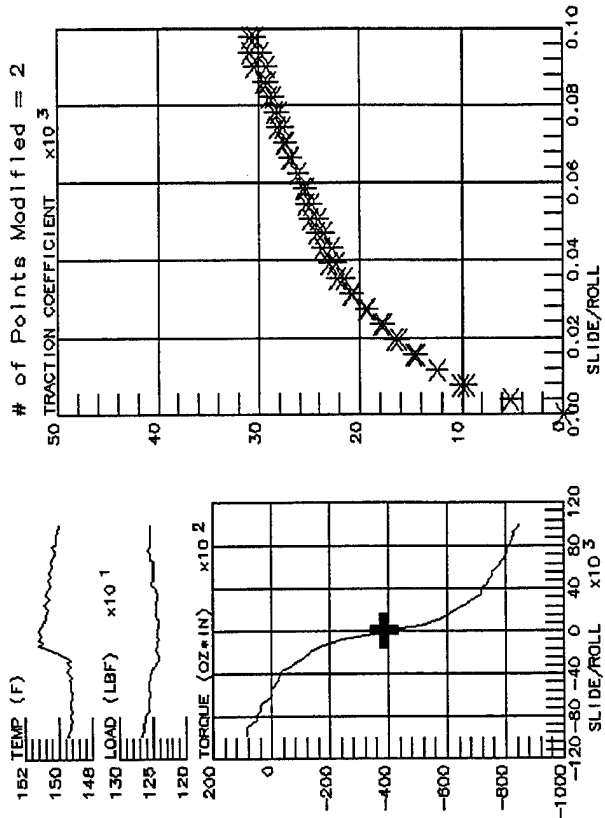
| | | |
|--|---------------|------|
| CC 89-180 Vistalube 7 150F 4LBF 650RPM 20 | FILE: v1st-09 | #211 |
|--|---------------|------|

of Points Modified = 1



CC 89-180 Vistalube 7
150F 13LBF 650RPM 21 FILE: v1st-09 #212

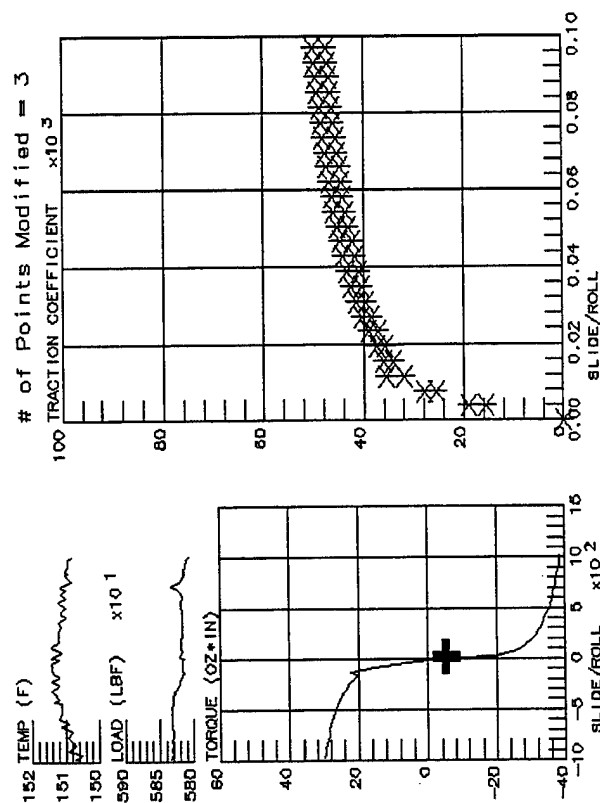
of Points Modified = 2



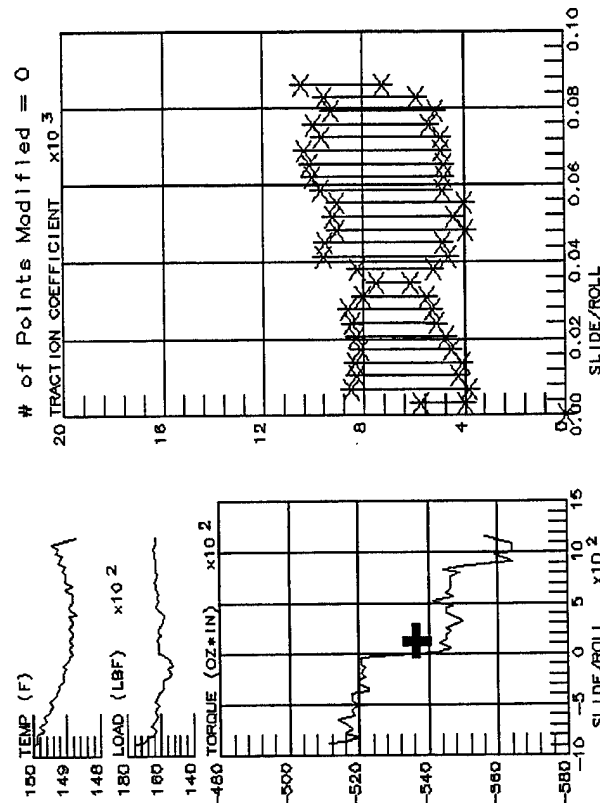
CC 89-180 Vistalube 7
150F 58LF 650REM 23 FILE: v1st-09

CC 89-180 Vistalube 7
150F 301BF 650RPM 22
FILE: vist-09
#213

FILE: v15t-08

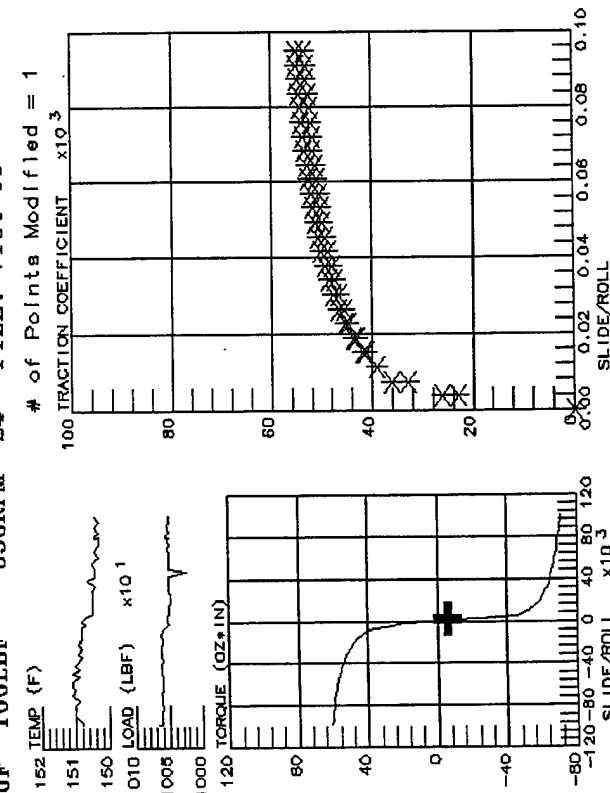
of Points Modified = 3
TRACTION COEFFICIENT $\times 10^3$ 

CC 89-180 Vistalube 7
150F 2LBF 1260RPM 25 FILE: v1st-09 #216

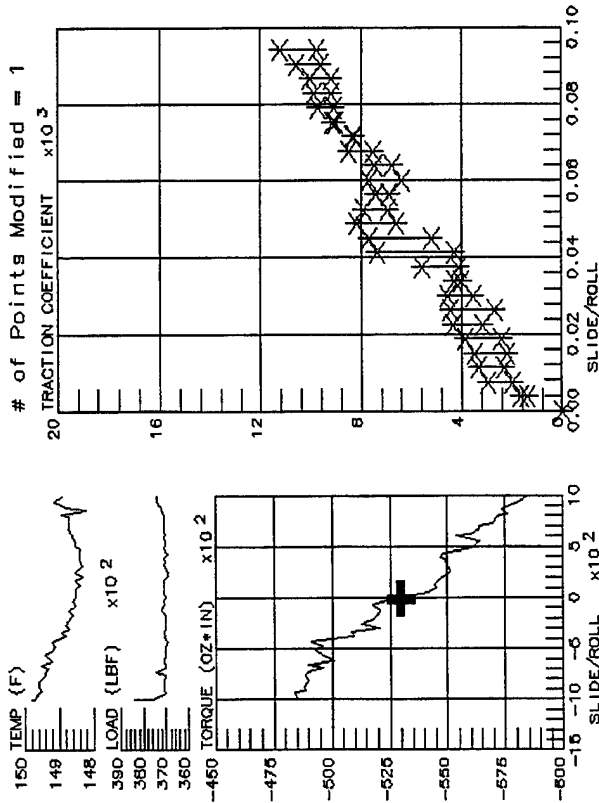
of Points Modified = 0
TRACTION COEFFICIENT $\times 10^3$ 

CC 89-180 Vistalube 7
 850RPM 24
 1001BE
 FILE: v1st-08
 #215

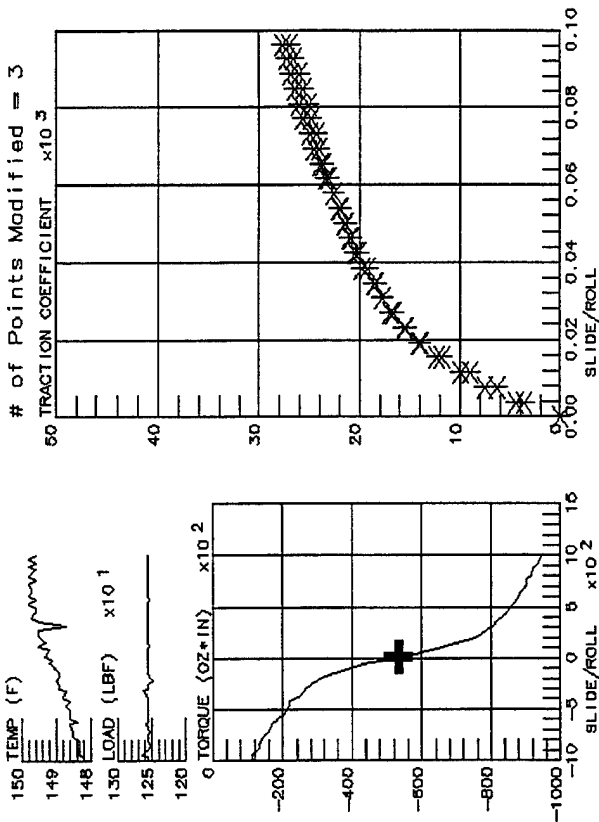
of Points Modified = 1



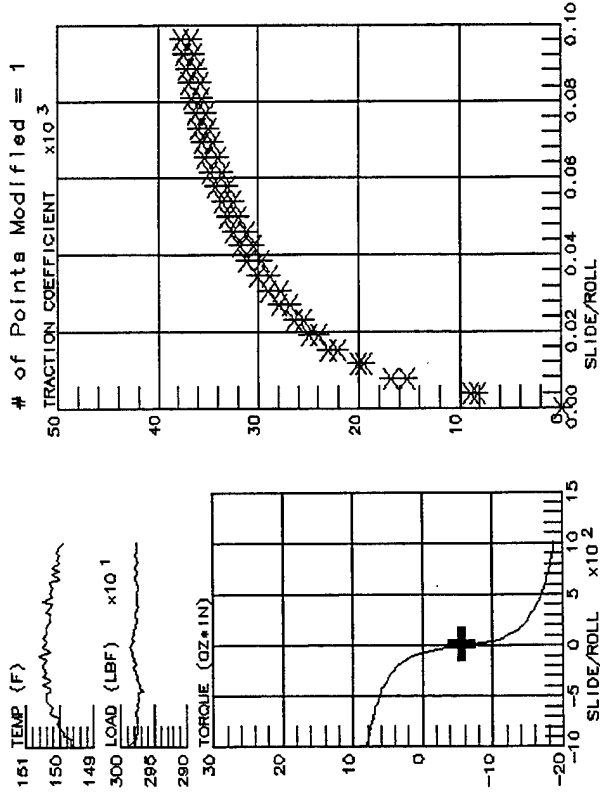
CC 89-180 Vistalube 7 #217
150F 4LBF 1260RPM 26 FILE: v1st-09
of Points Modified = 1



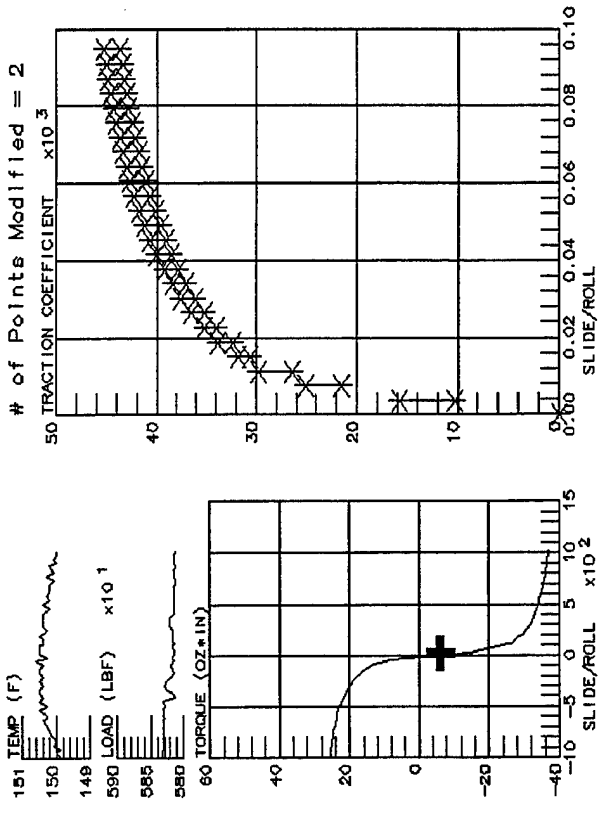
CC 89-180 Vistalube 7 #218
150F 13LBF 1260RPM 27 FILE: v1st-09
of Points Modified = 3



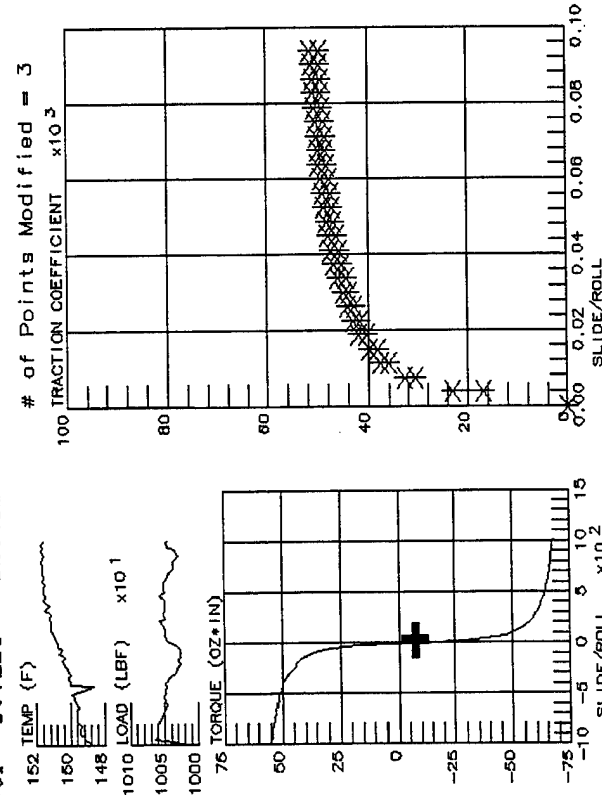
CC 89-180 Vistalube 7 #219
150F 30LBF 1260RPM 28 FILE: v1st-09
of Points Modified = 1



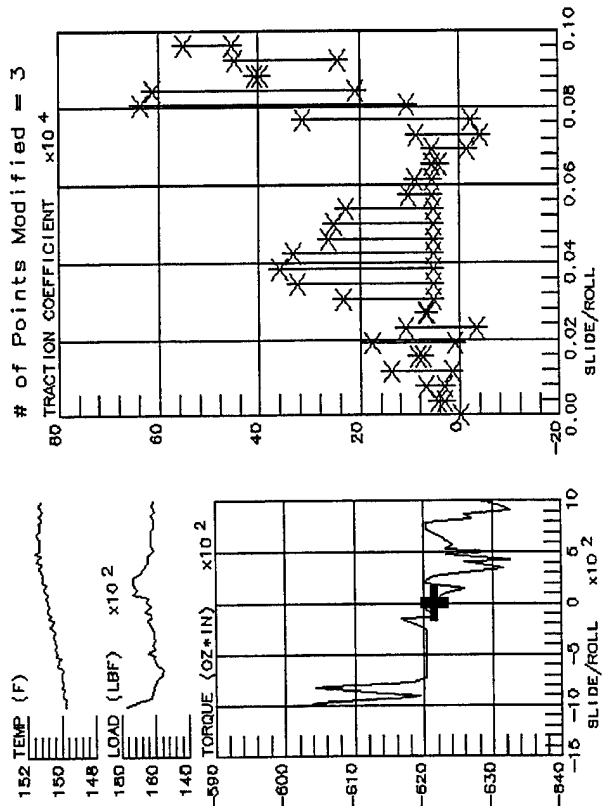
CC 89-180 Vistalube 7 #220
150F 58LBF 1260RPM 29 FILE: v1st-09
of Points Modified = 2



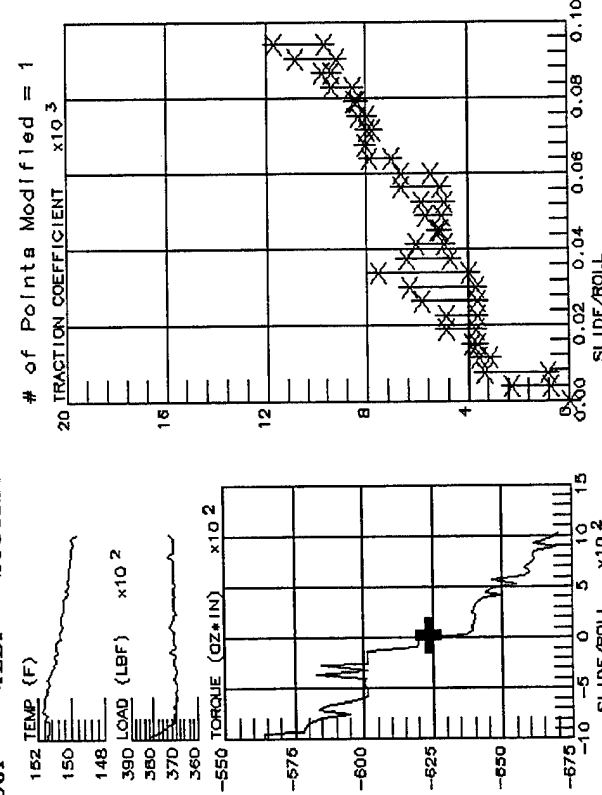
CC 89-180 Vistalube 7 #221
150F 100LBF 1260RPM 30 FILE: v1st-09



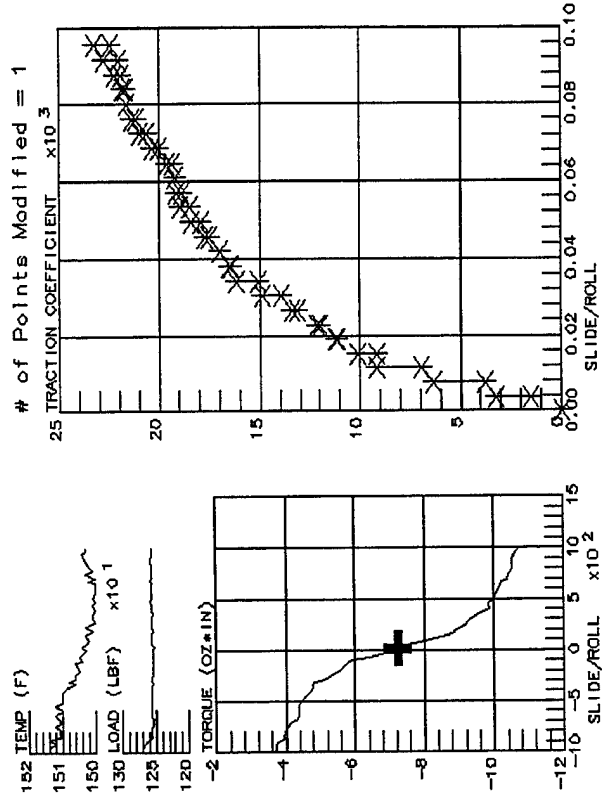
CC 89-180 Vistalube 7 #222
150F 2LBF 2559RPM 31 FILE: v1st-09



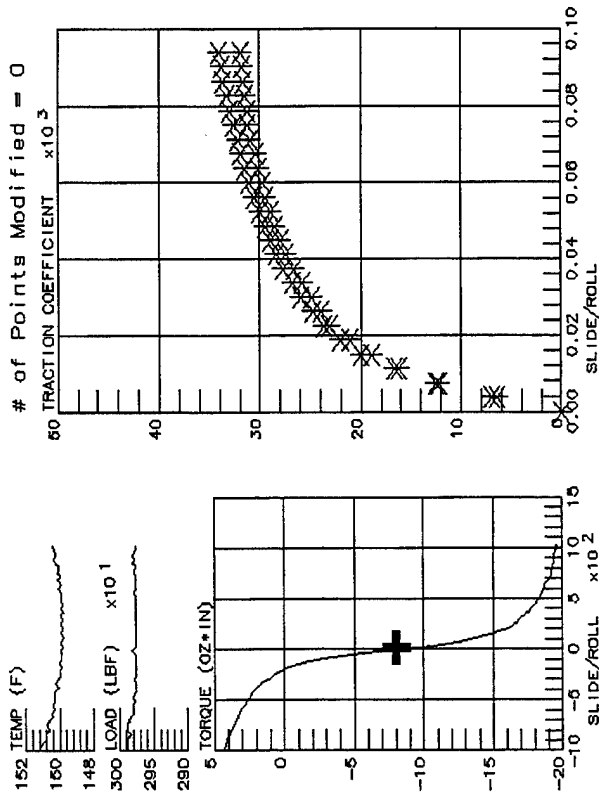
CC 89-180 Vistalube 7 #223
150F 4LBF 2559RPM 32 FILE: v1st-09



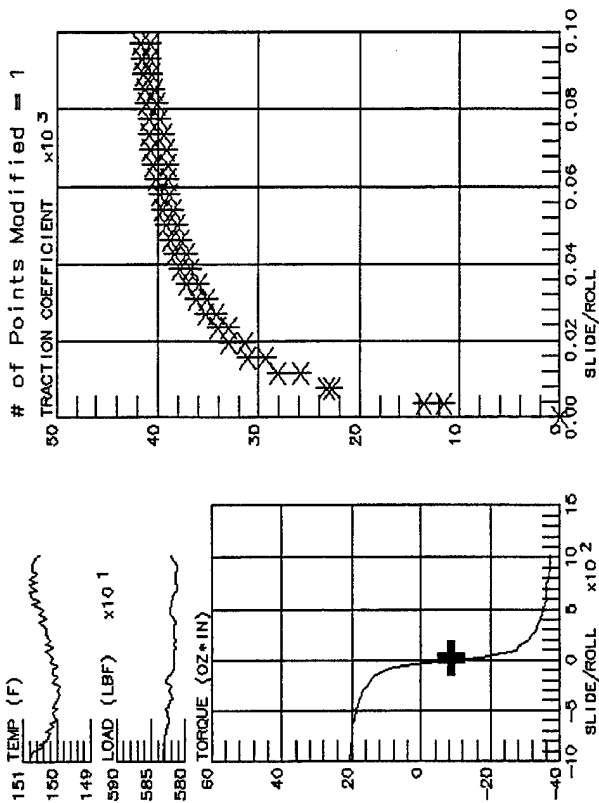
CC 89-180 Vistalube 7 #224
150F 13LBF 2559RPM 33 FILE: v1st-09



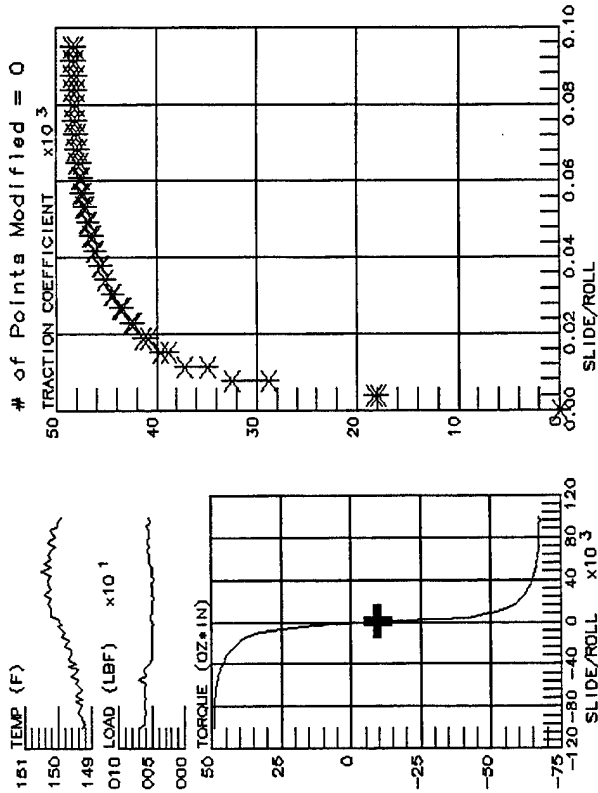
CC 89-180 Vistalube 7 #225
150F 30LBF 2559RPM 34 FILE: v1st-09



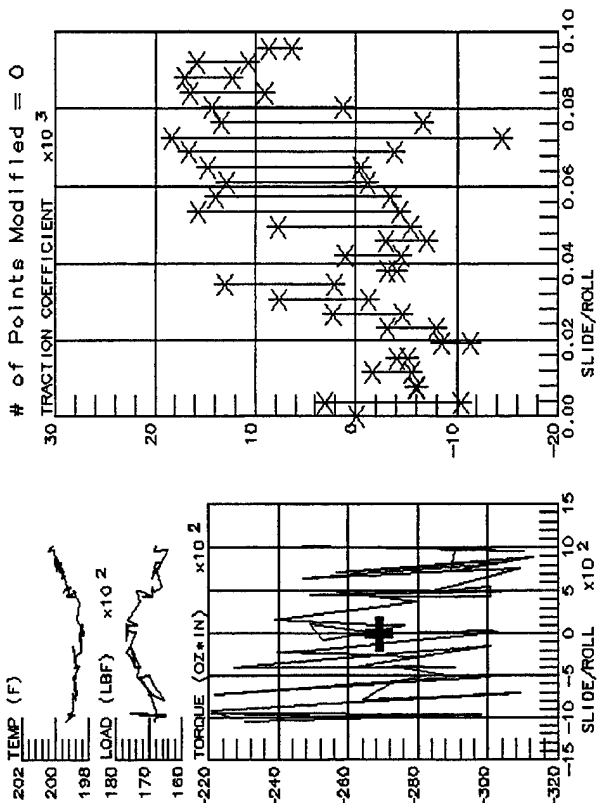
CC 89-180 Vistalube 7 #228
150F 68LBF 2559RPM 36 FILE: v1st-09



CC 89-180 Vistalube 7 #227
150F 100LBF 2559RPM 36 FILE: v1st-09

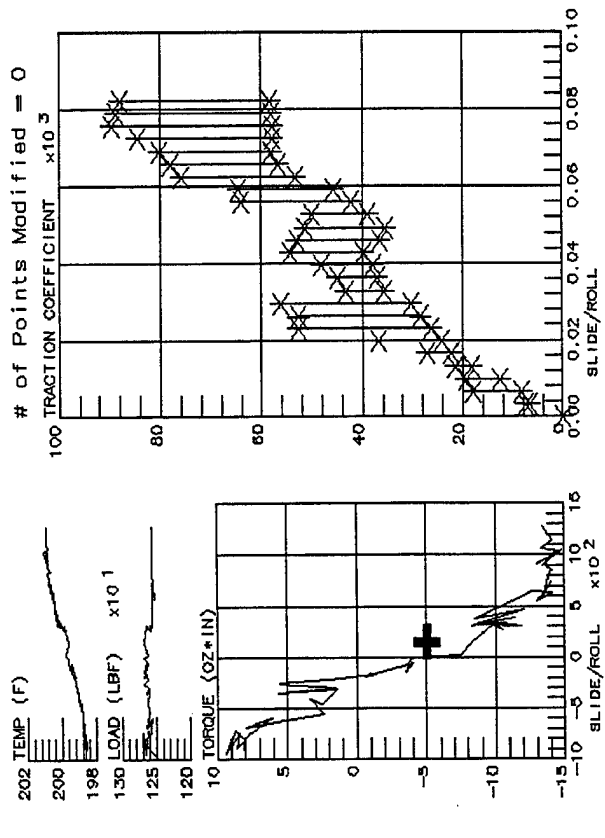
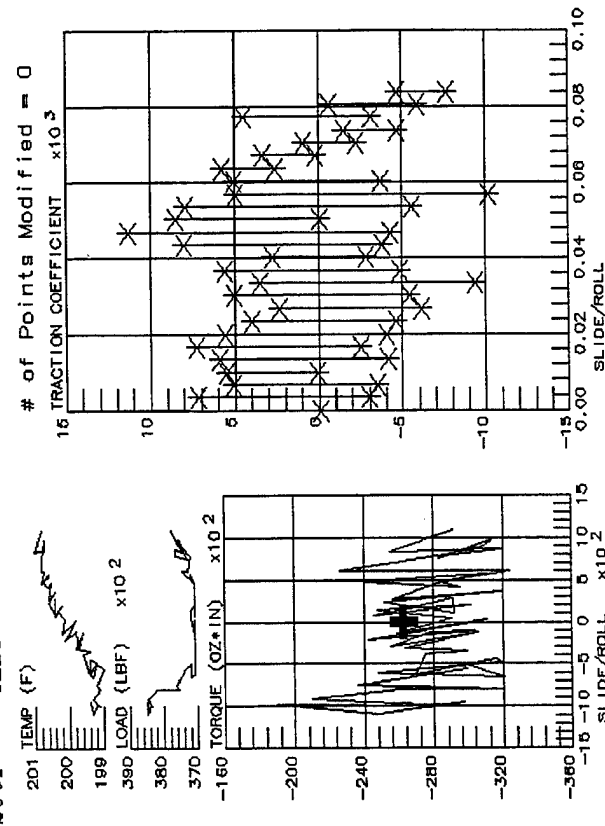


CC 89-180 Vistalube 7 #228
200F 2LBF 78RPM 1 FILE: v1st-10



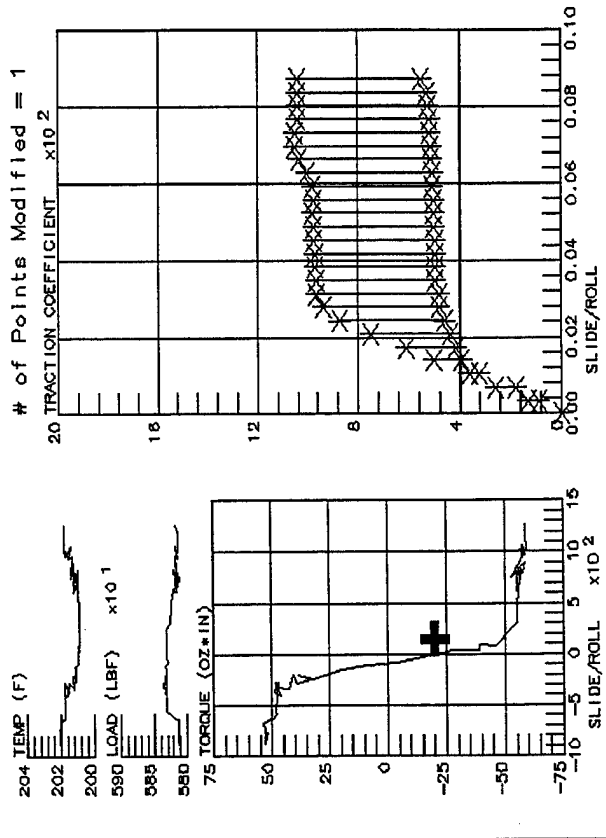
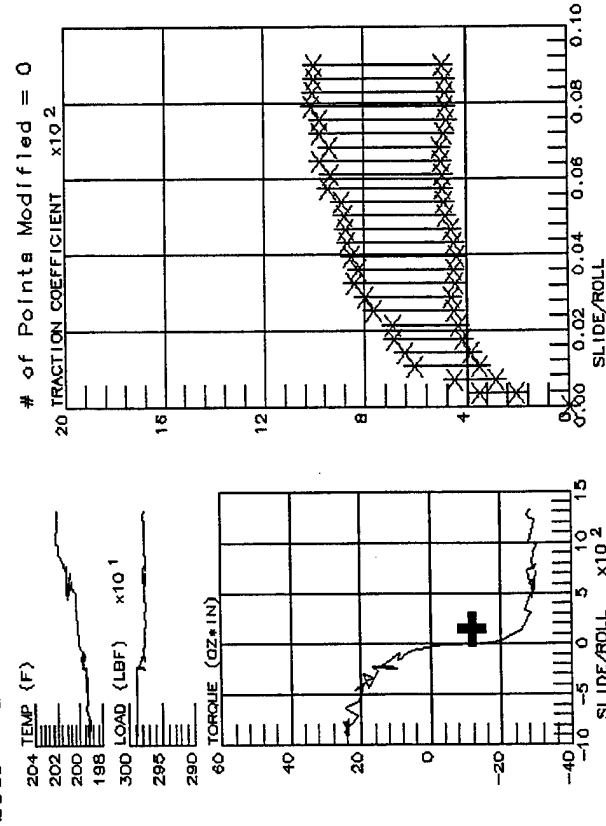
CC 89-180 Vistalube 7
200F 4LBF 76RPM 2 FILE: v1st-10

CC 89-180 Vistalube 7
200F 13LBF 76RPM 3 FILE: v1st-10

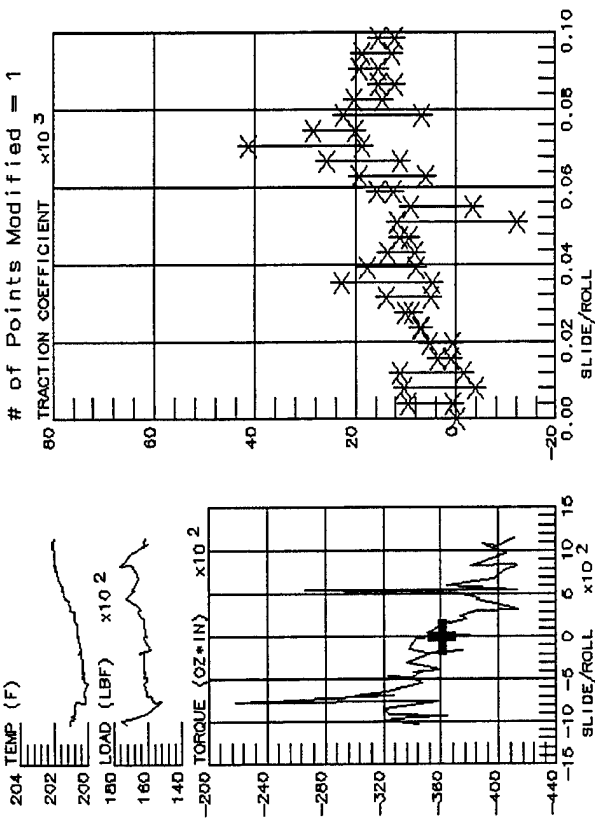
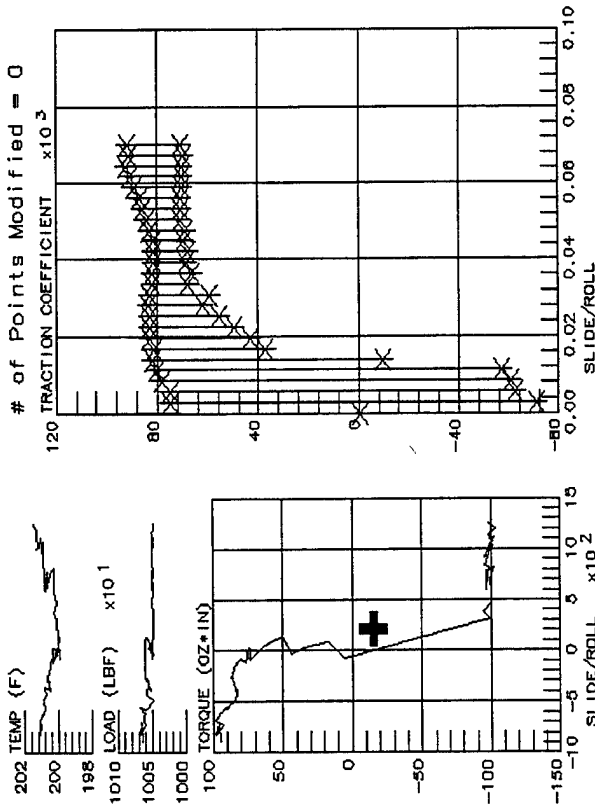


CC 89-180 Vistalube 7
200F 30LBF 76RPM 4 FILE: v1st-10

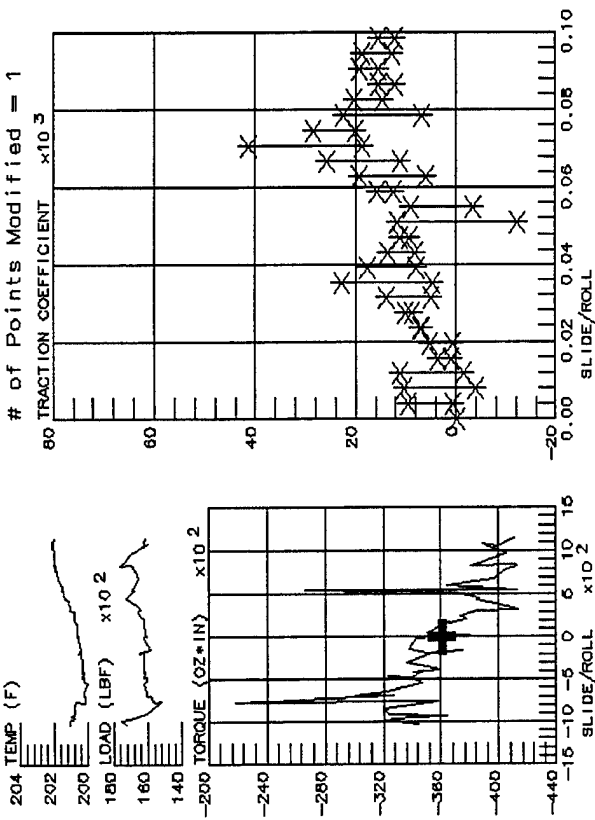
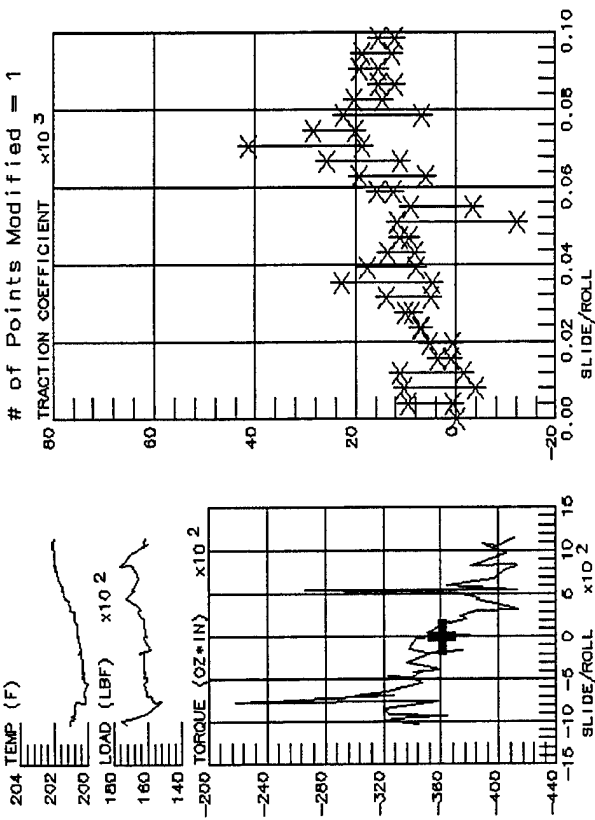
CC 89-180 Vistalube 7
200F 58LBF 76RPM 5 FILE: v1st-10



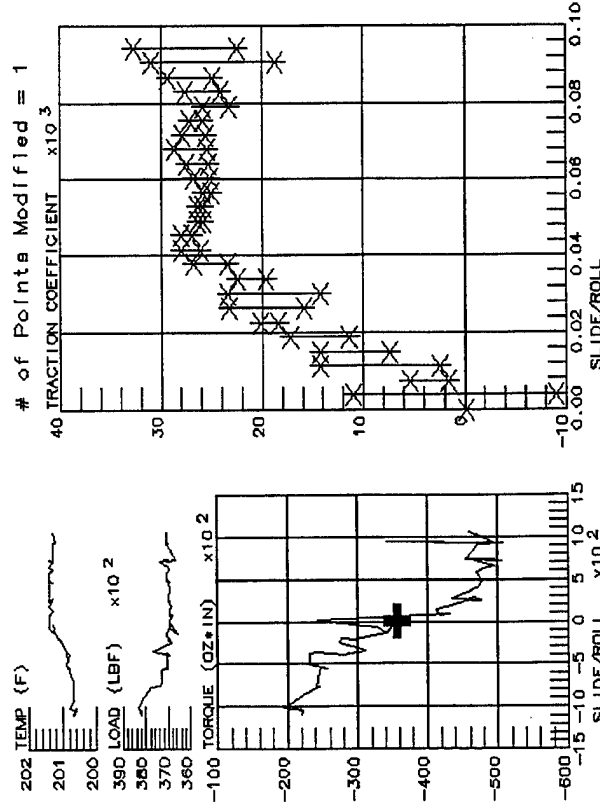
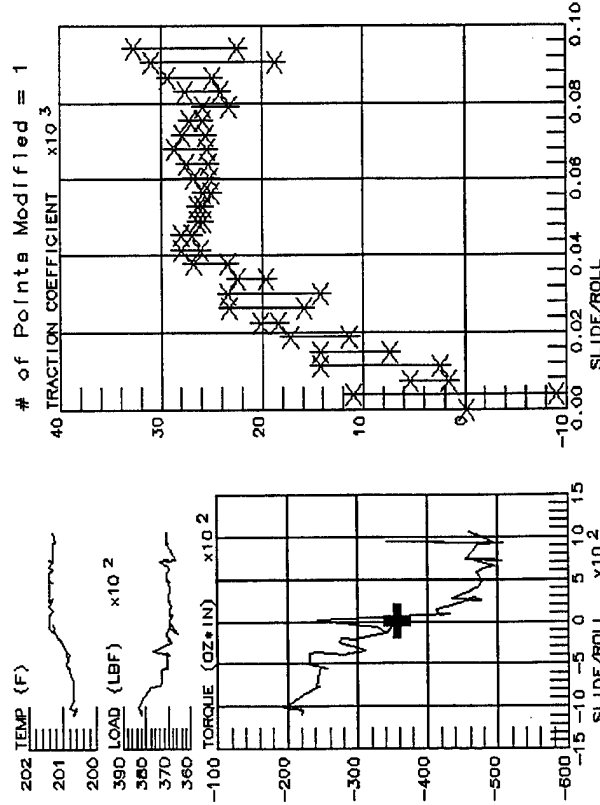
CC 89-180 Vistalube 7 #233
200F 100LBF 76RPM 6 FILE: v1st-10



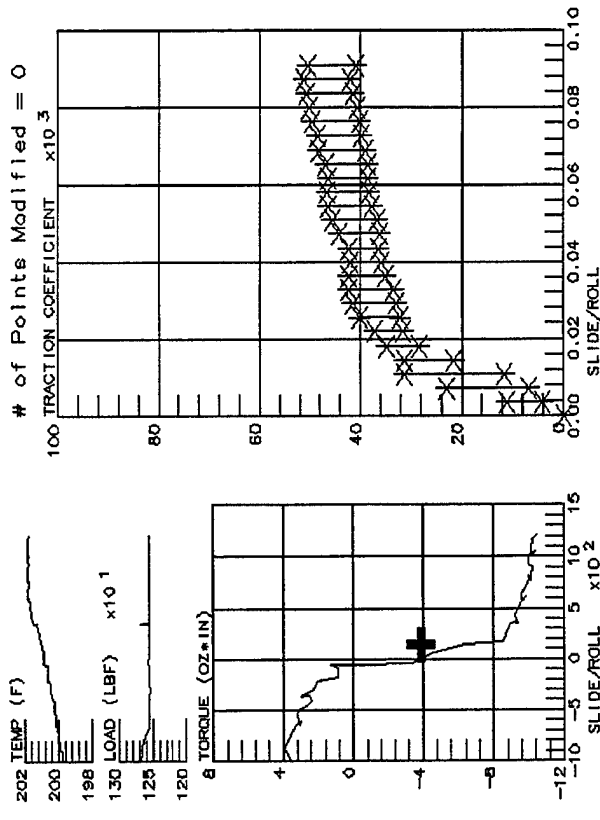
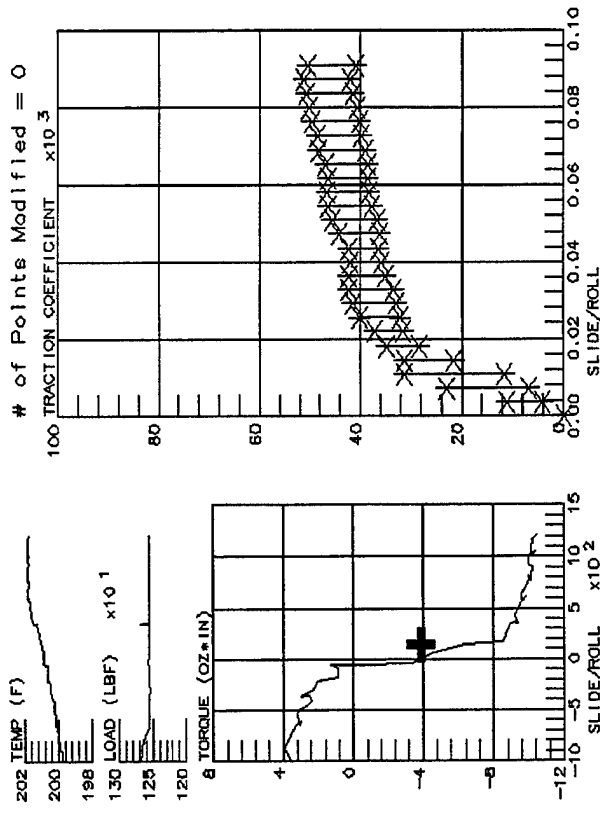
CC 89-180 Vistalube 7 #234
200F 2LBF 152RPM 7 FILE: v1st-10

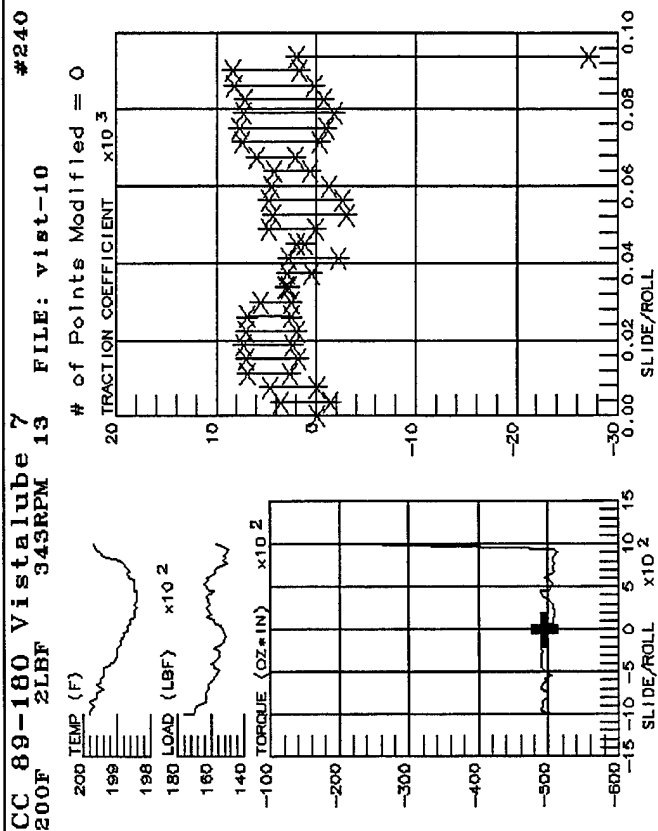
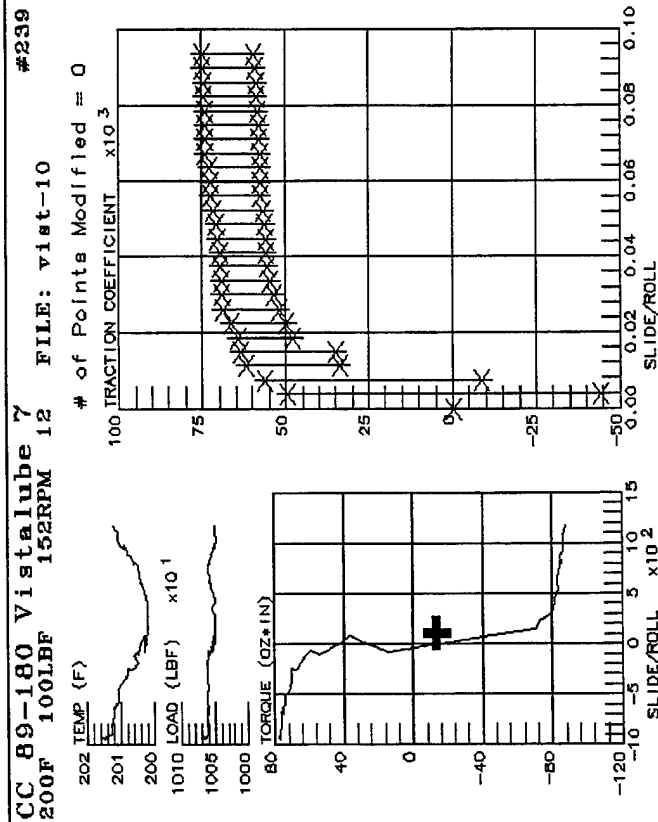
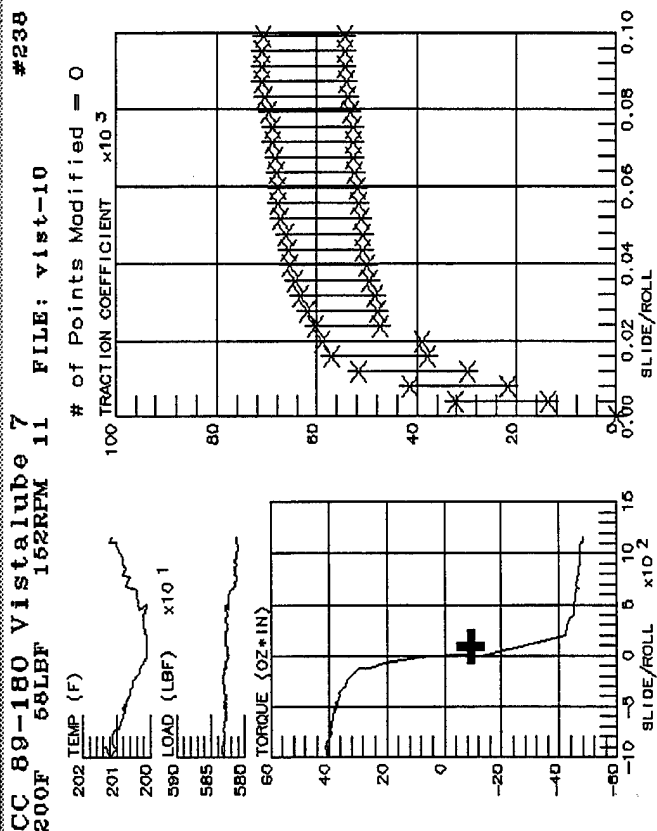
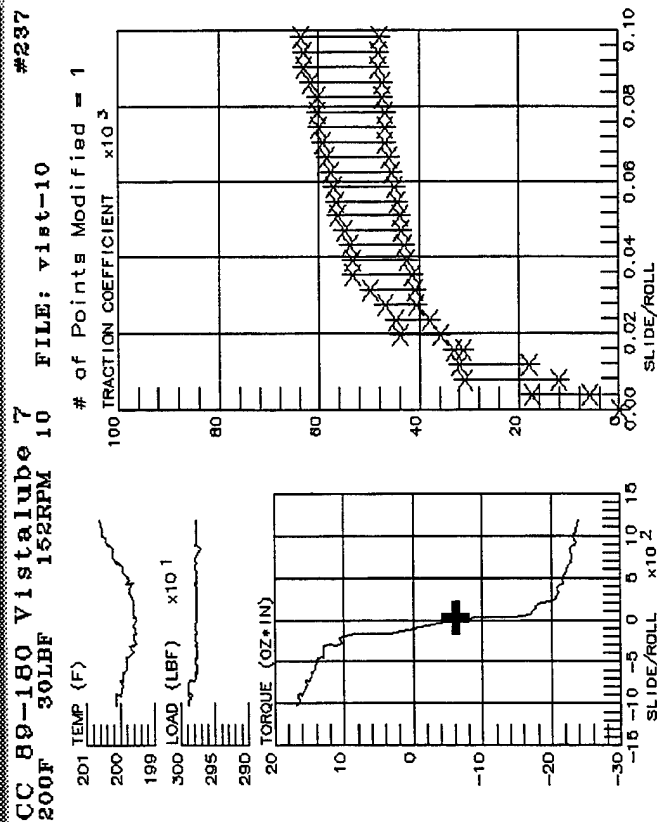


CC 89-180 Vistalube 7 #235
200F 4LBF 152RPM 8 FILE: v1st-10

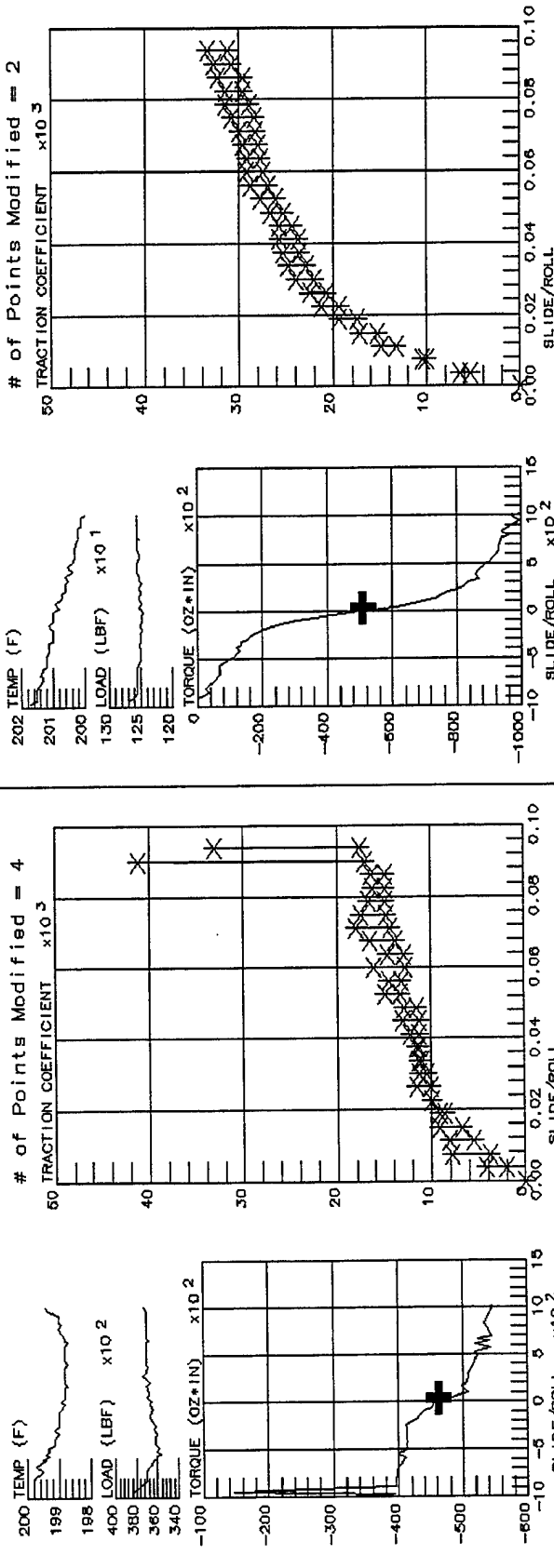


CC 89-180 Vistalube 7 #236
200F 13LBF 152RPM 9 FILE: v1st-10

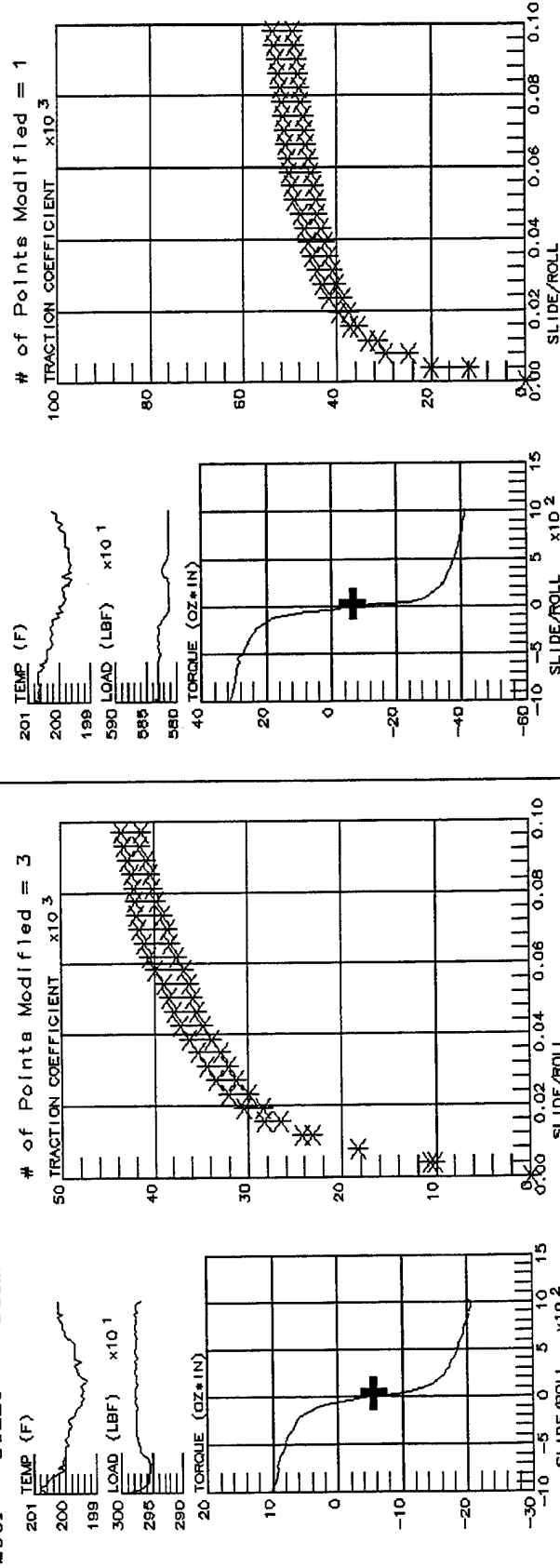


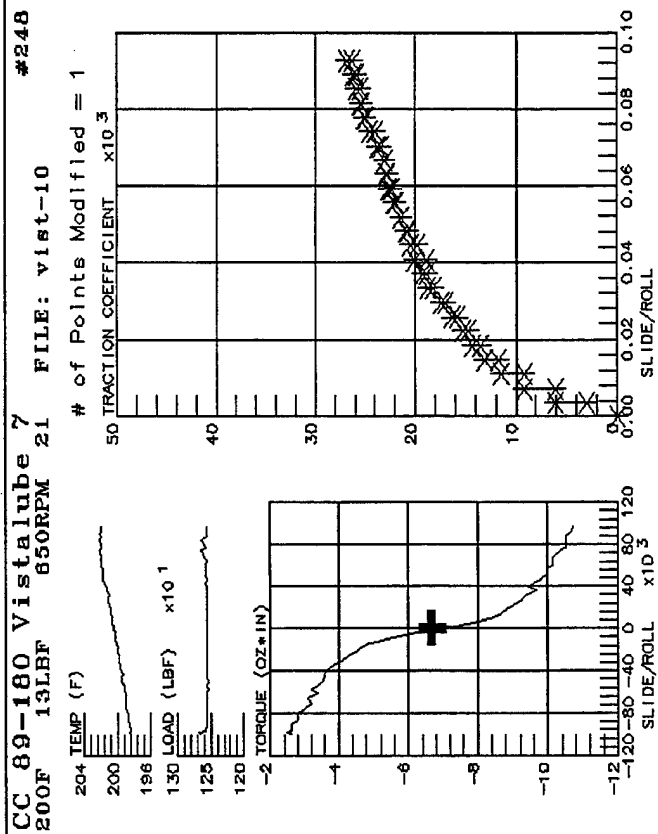
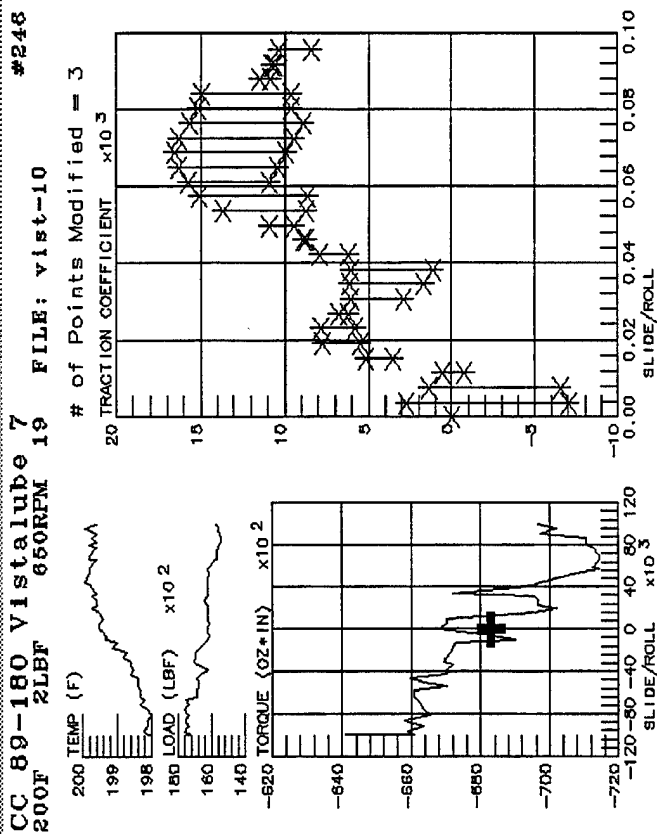
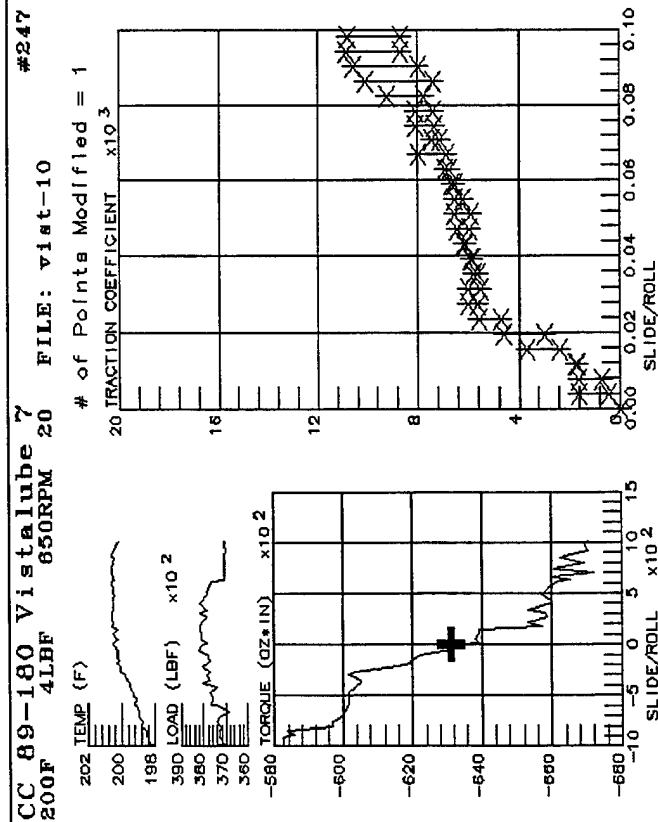
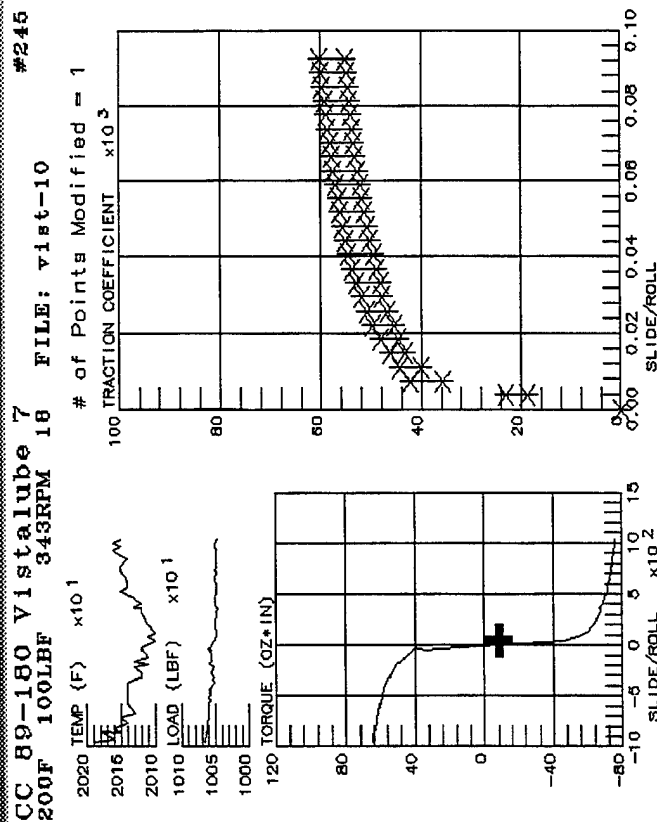


CC 89-180 Vistalube 7 #241
200F 41BF 343RPM 14 FILE: v1st-10
of Points Modified = 4

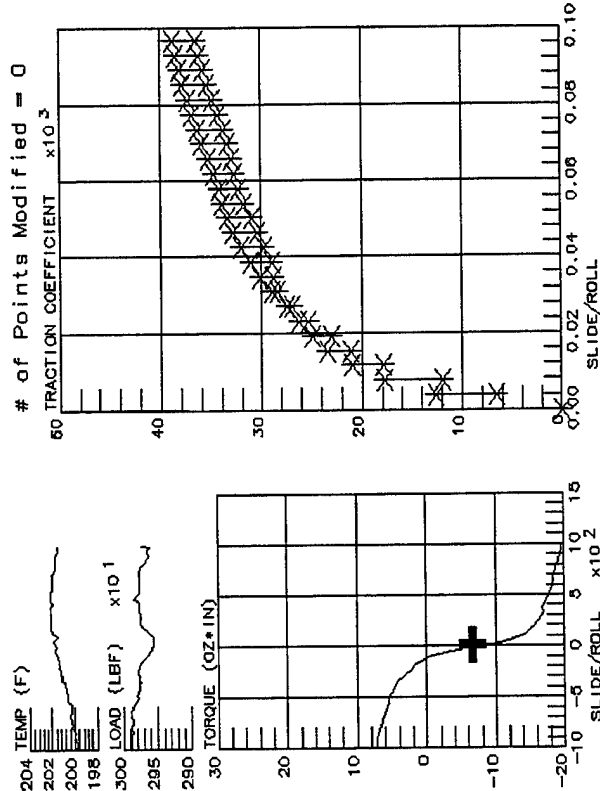


CC 89-180 Vistalube 7 #244
200F 58LBF 343RPM 17 FILE: v1st-10
of Points Modified = 1

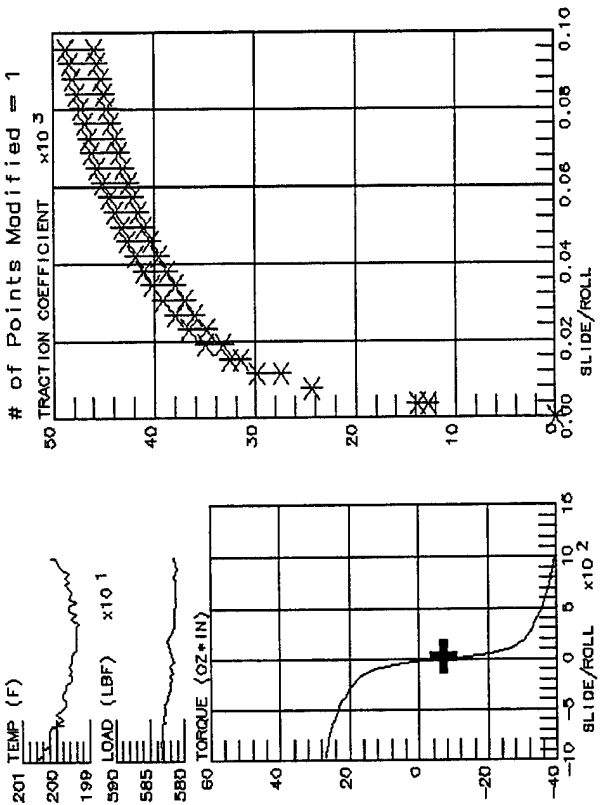




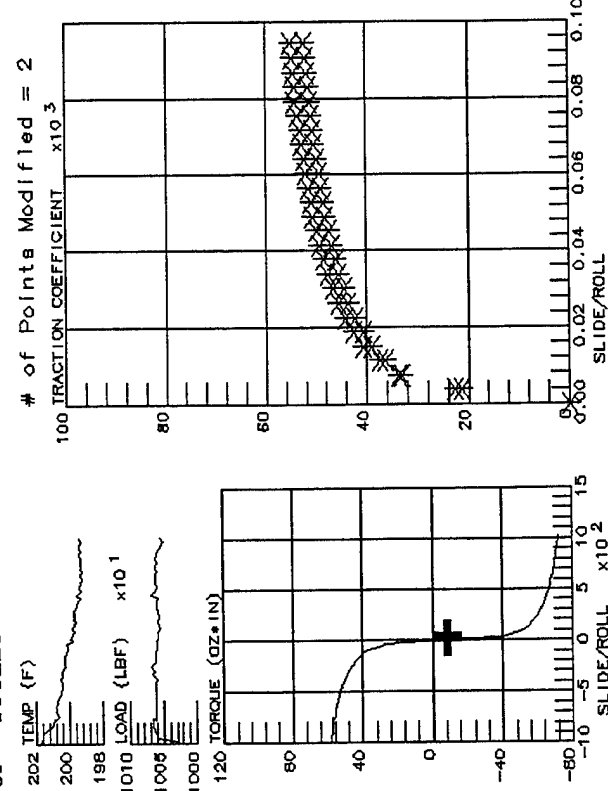
CC 89-180 Vistalube 7 #249
200F 30LBF 650RPM 22 FILE: v1st-10



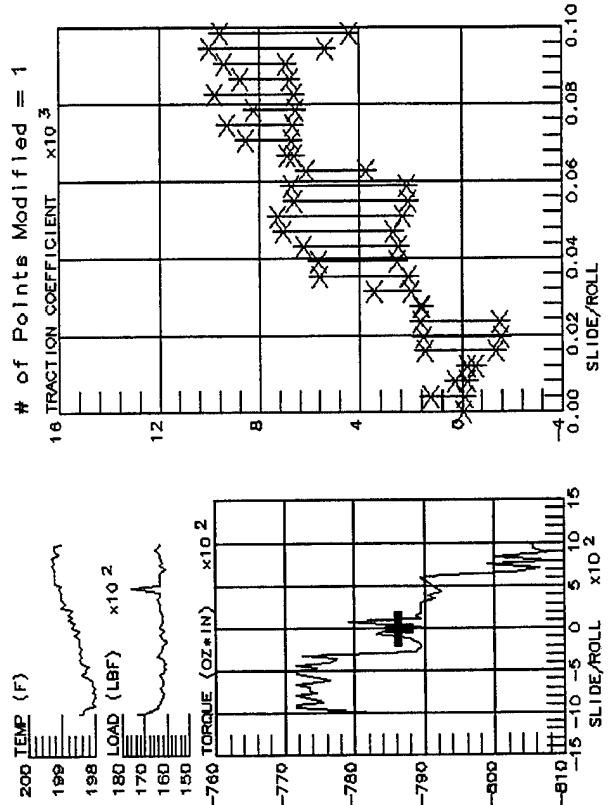
CC 89-180 Vistalube 7 #250
200F 68LBF 650RPM 23 FILE: v1st-10

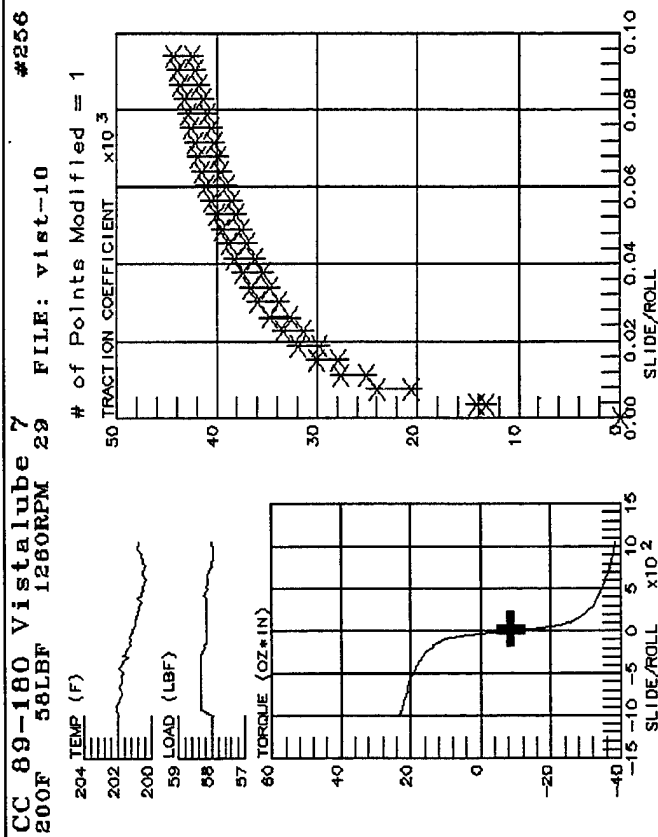
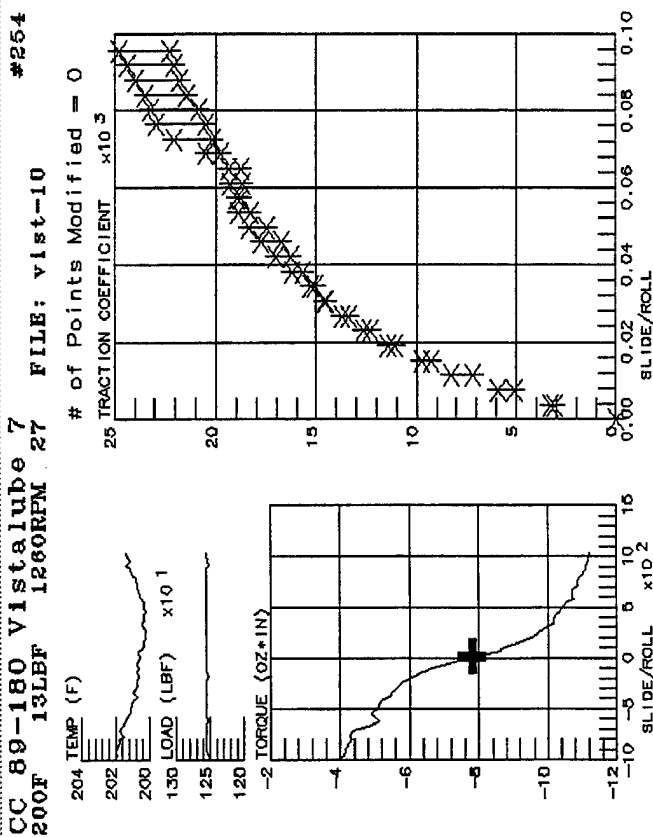
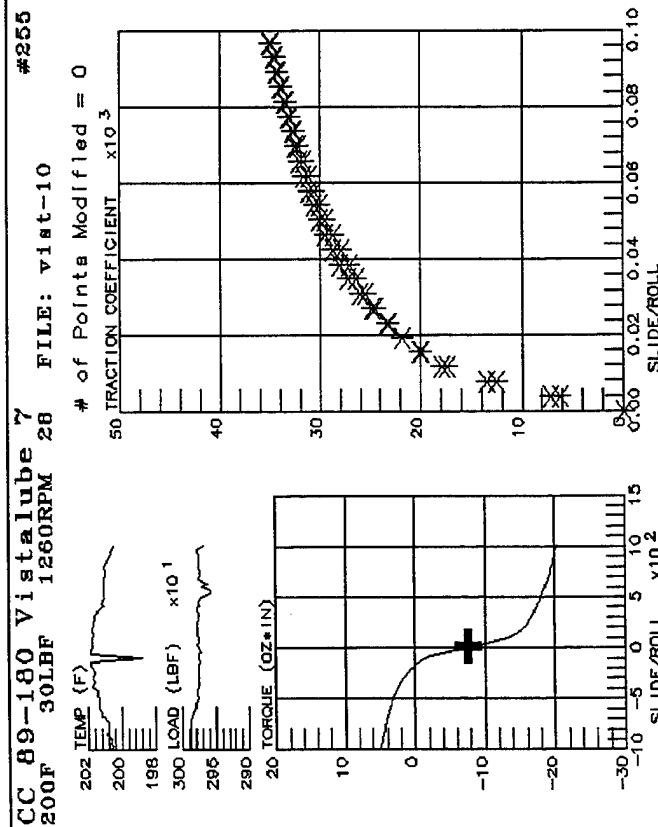
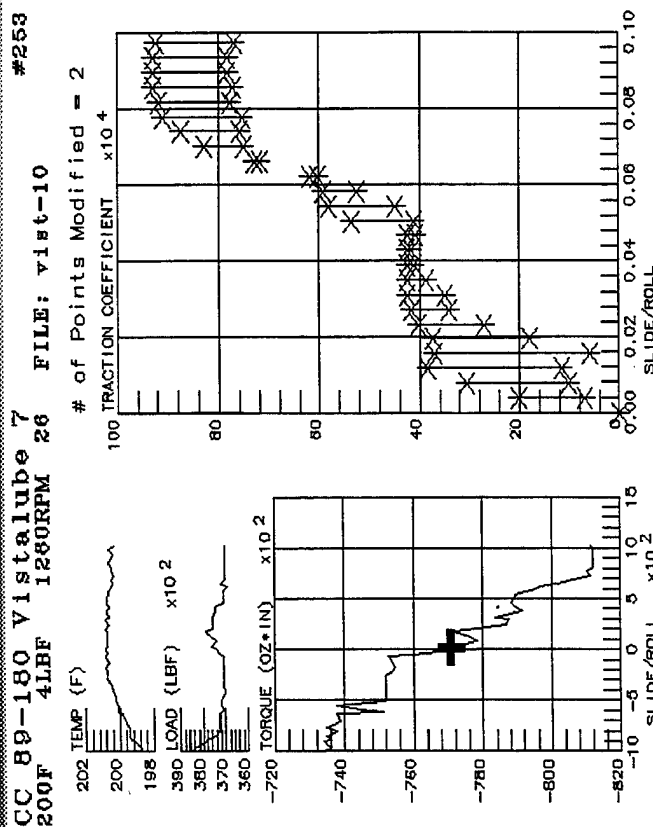


CC 89-180 Vistalube 7 #251
200F 100LBF 650RPM 24 FILE: v1st-10

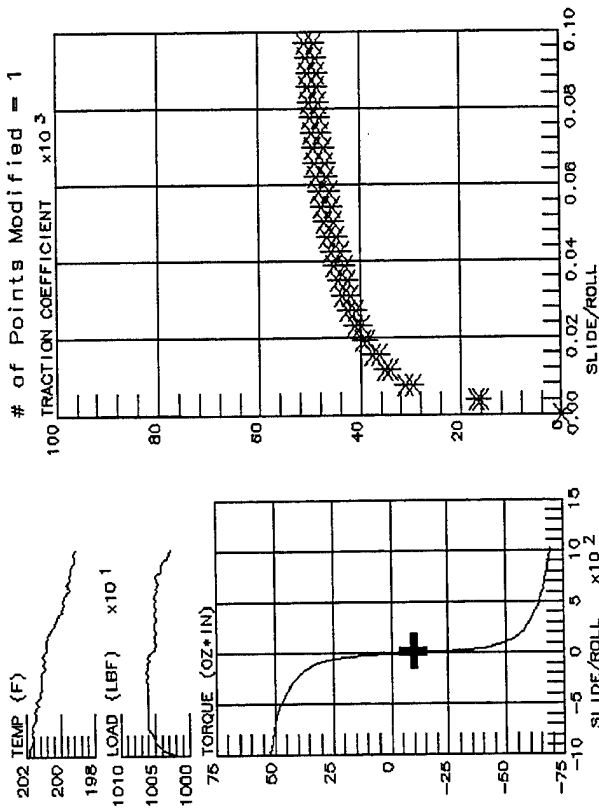


CC 89-180 Vistalube 7 #252
200F 2LBF 1280RPM 25 FILE: v1st-10

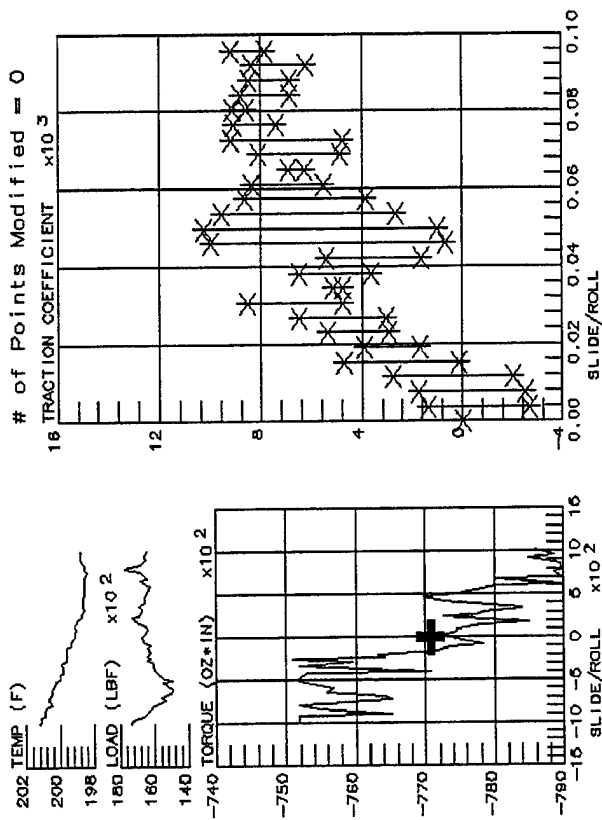




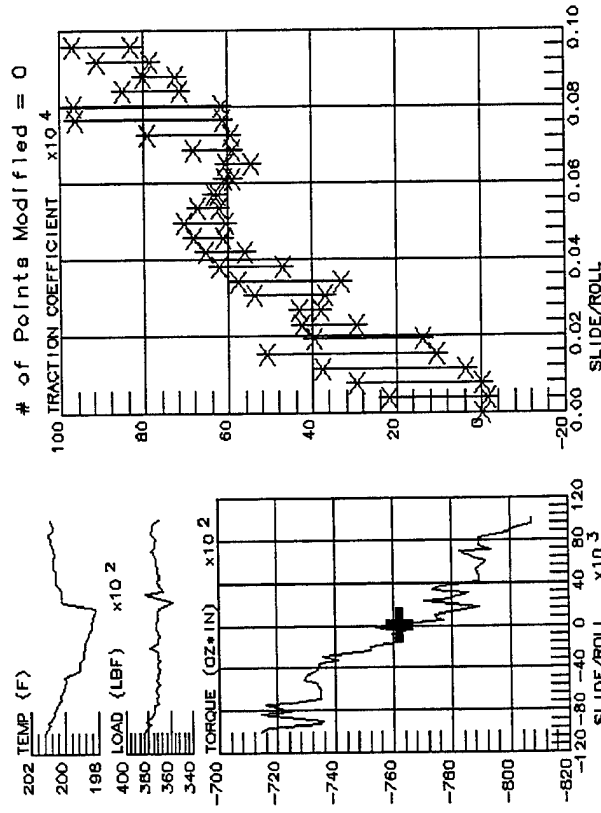
CC 89-180 Vistalube 7 #257
200F 100LBF 1260RPM 30 FILE: v1st-10
of Points Modified = 1



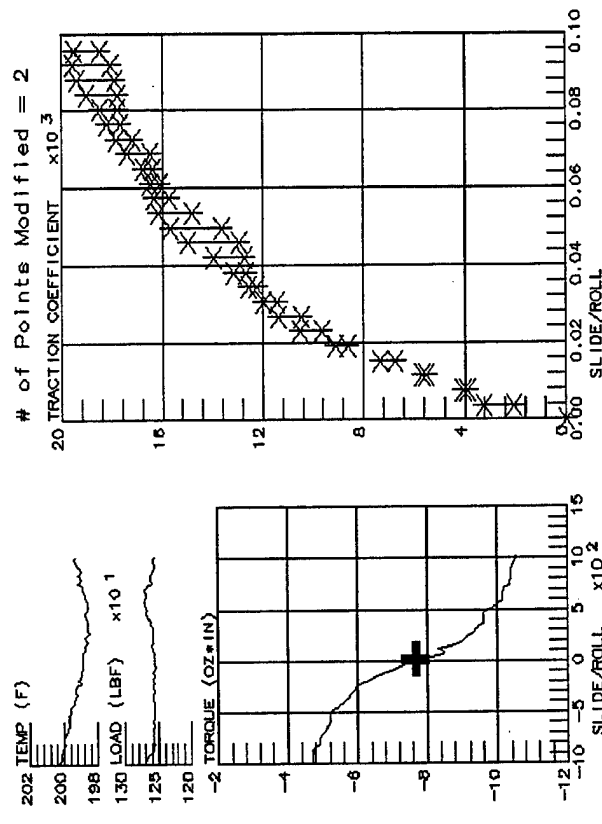
CC 89-180 Vistalube 7 #258
200F 2LBF 2559RPM 31 FILE: v1st-10
of Points Modified = 0

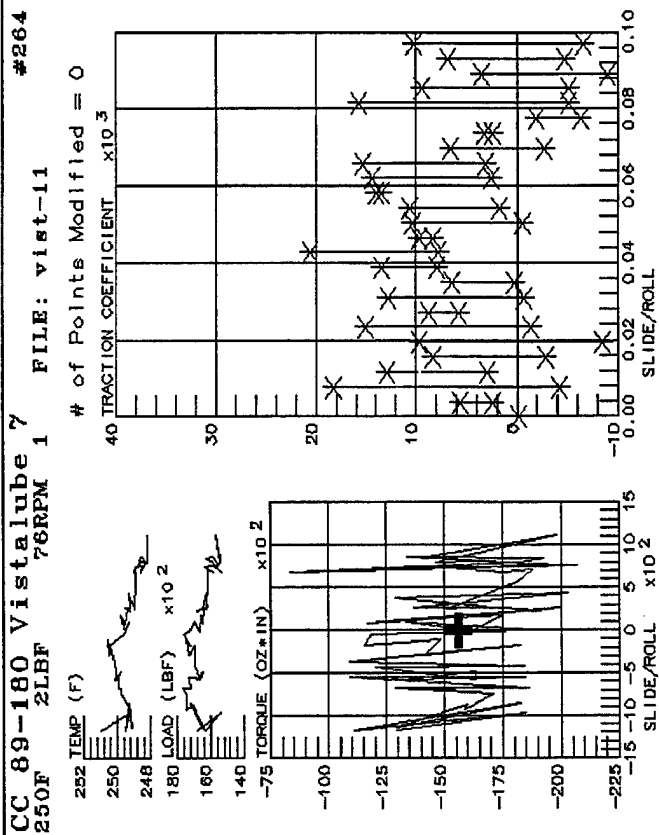
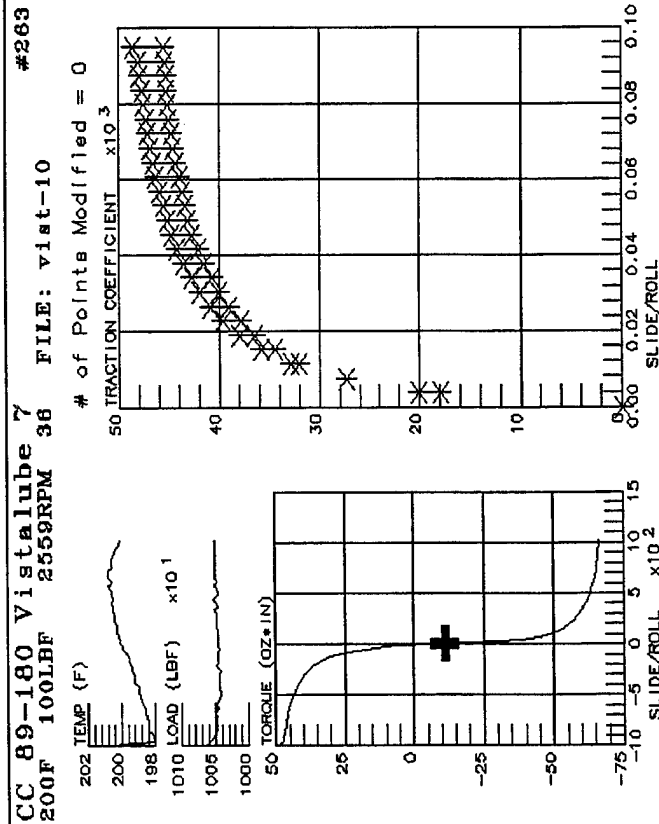
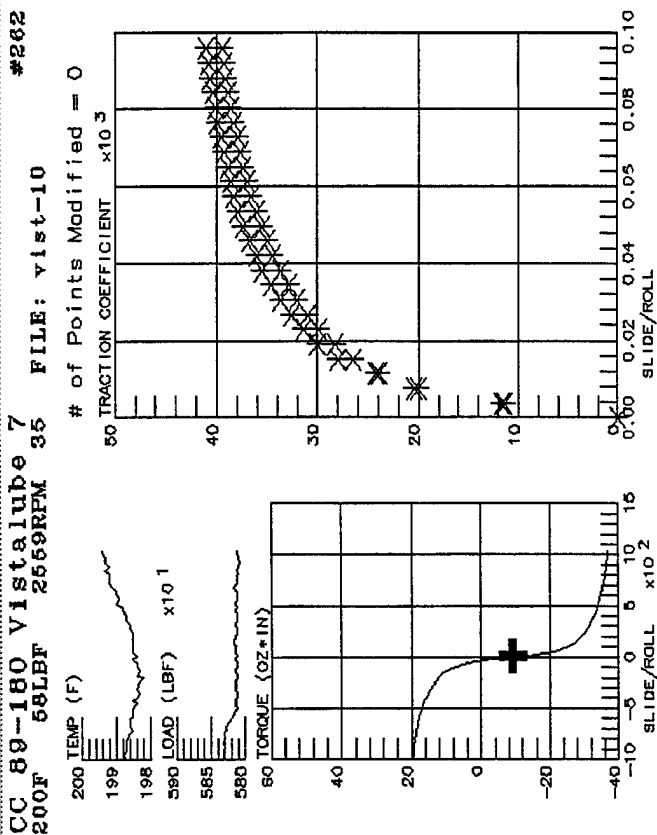
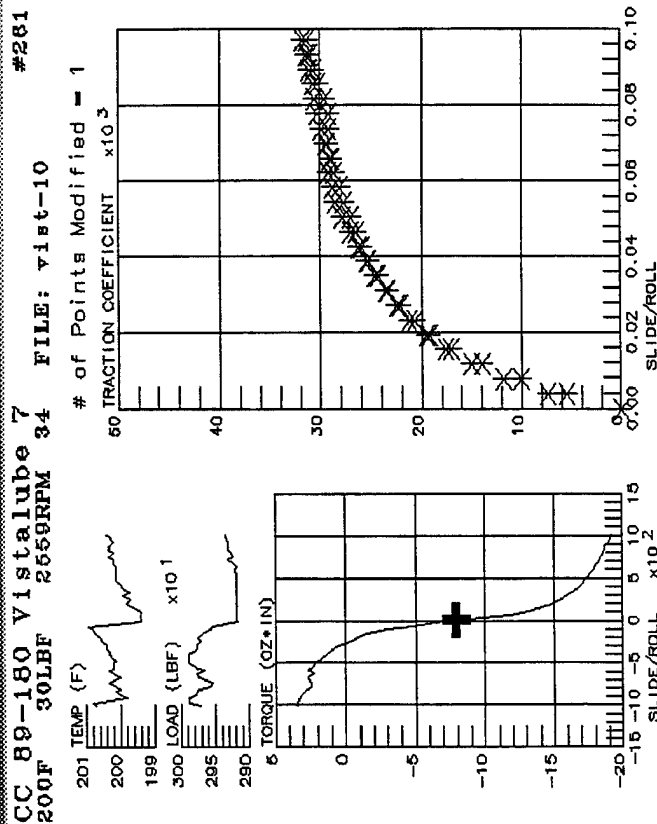


CC 89-180 Vistalube 7 #259
200F 4LBF 2559RPM 32 FILE: v1st-10
of Points Modified = 0

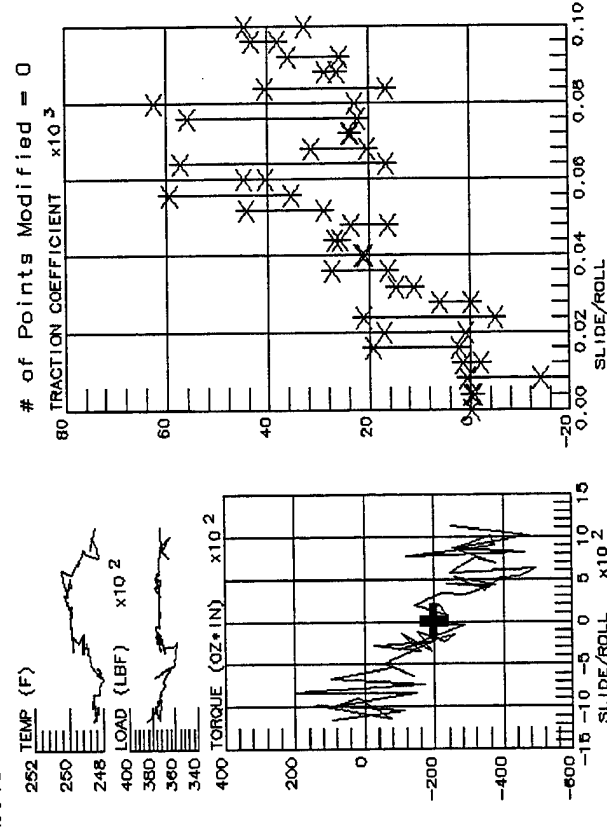


CC 89-180 Vistalube 7 #260
200F 13LBF 2559RPM 33 FILE: v1st-10
of Points Modified = 2

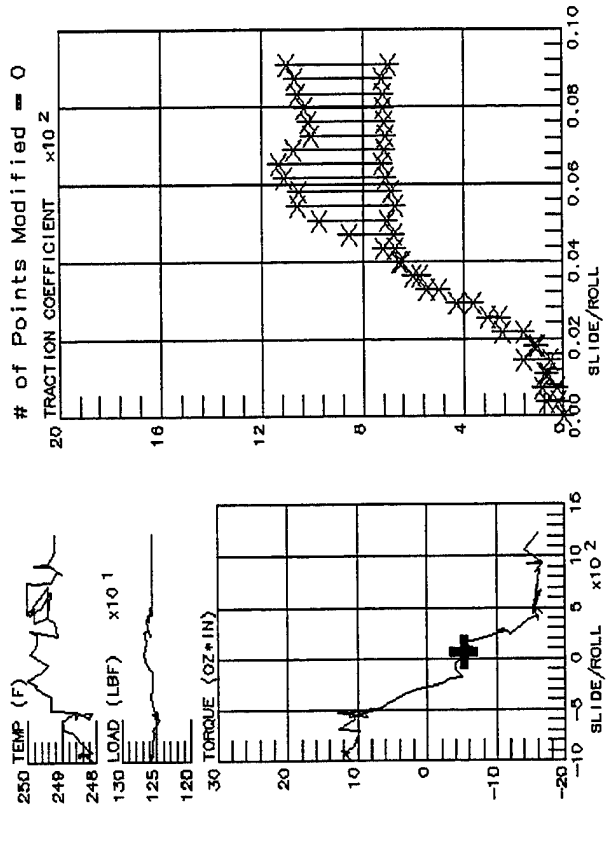




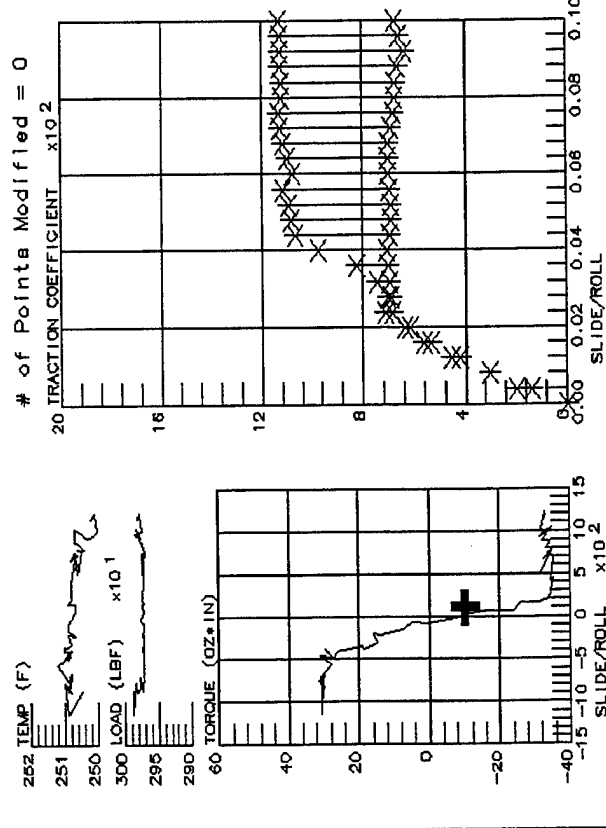
CC 89-180 Vistalube 7
250F 4LBF 76RPM 2 FILE: v1st-11 #265



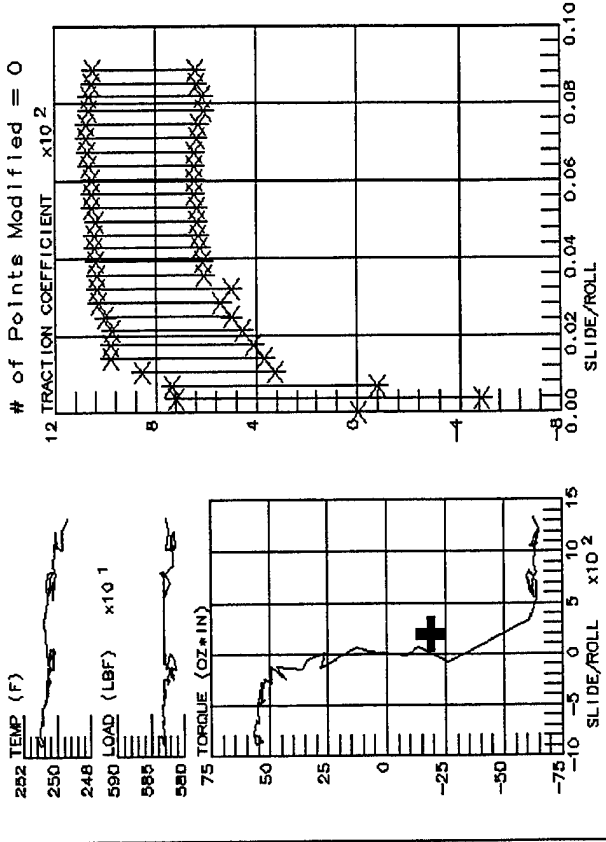
CC 89-180 Vistalube 7
250F 13LBF 76RPM 3 FILE: v1st-11 #268



CC 89-180 Vistalube 7
250F 30LBF 76RPM 4 FILE: v1st-11 #267

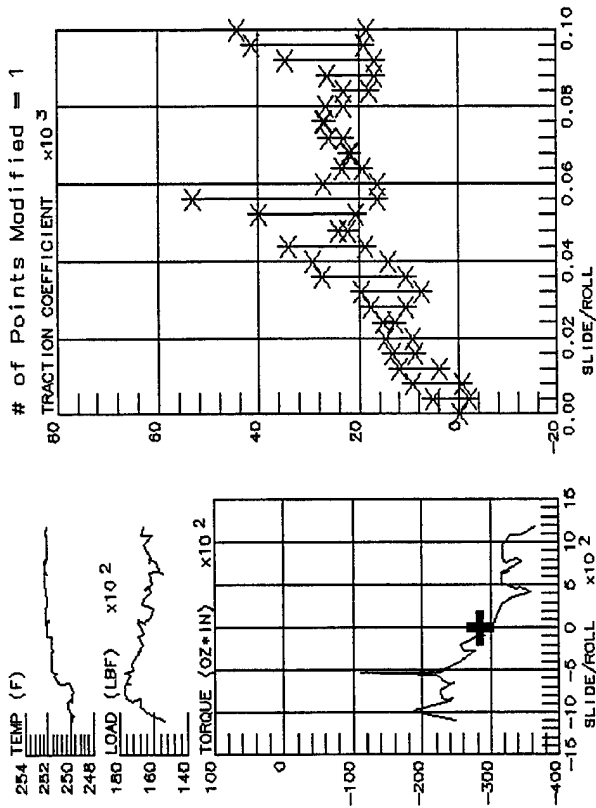
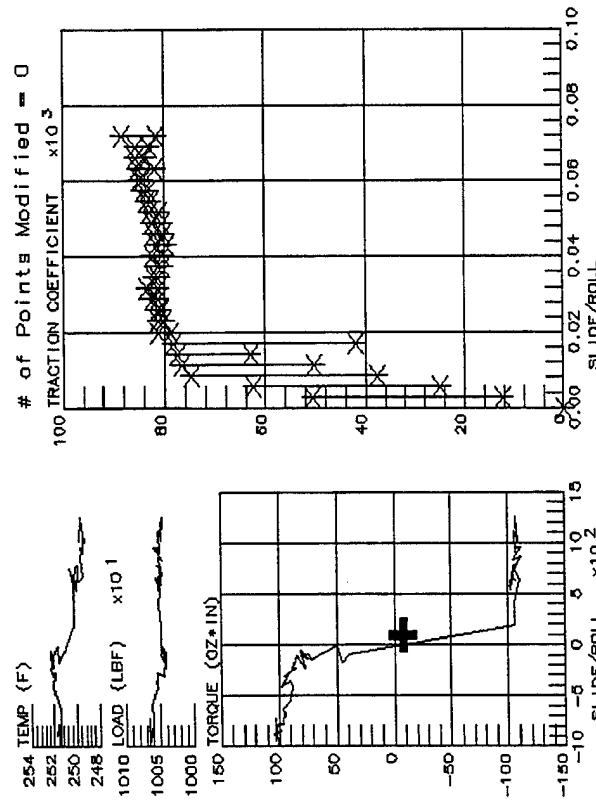


CC 89-180 Vistalube 7
250F 58LBF 76RPM 5 FILE: v1st-11 #268



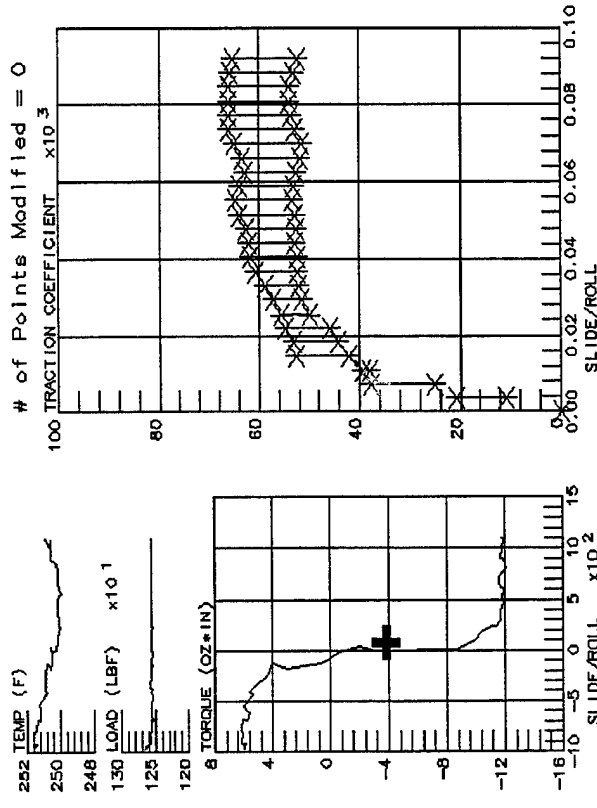
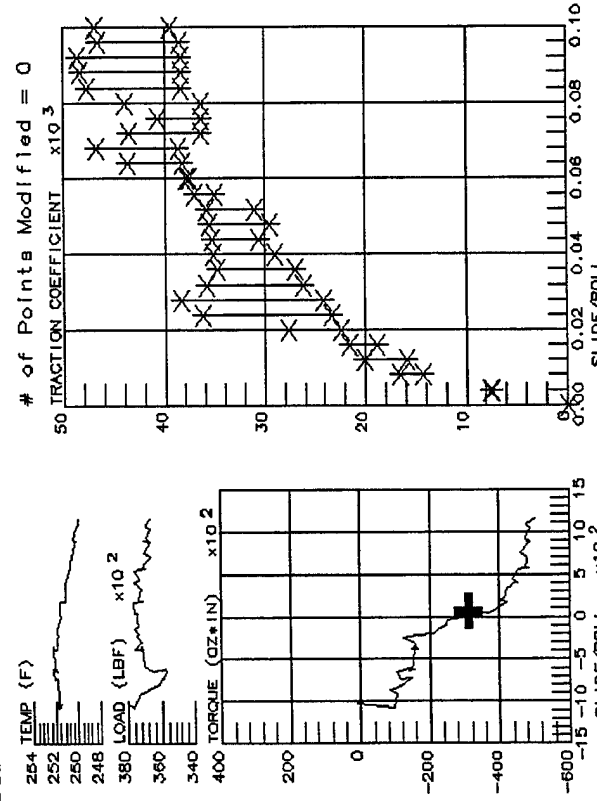
CC 89-180 Vistalube 7
250F 100LBF 76RPM 6 FILE: v1st-11

CC 89-180 Vistalube 7
250F 2LBF 152RPM 7 FILE: v1st-11

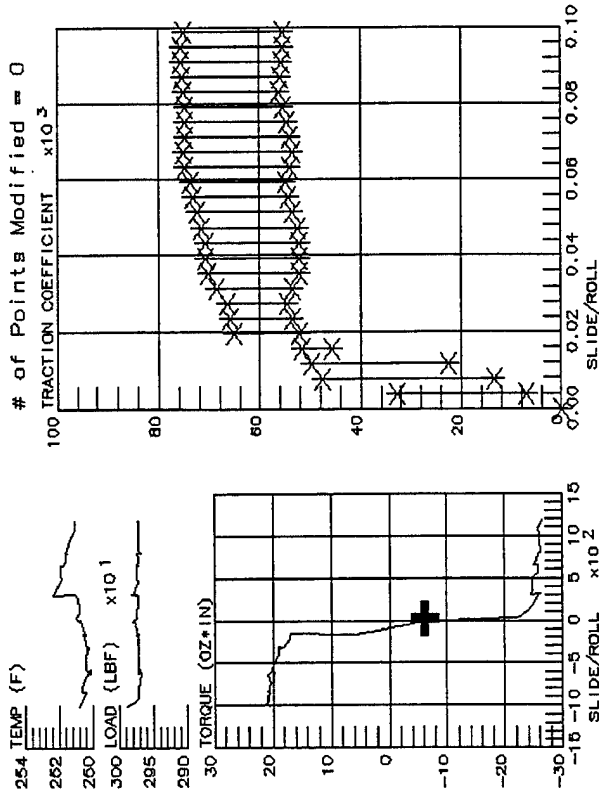


CC 89-180 Vistalube 7
250F 4LBF 152RPM 8 FILE: v1st-11

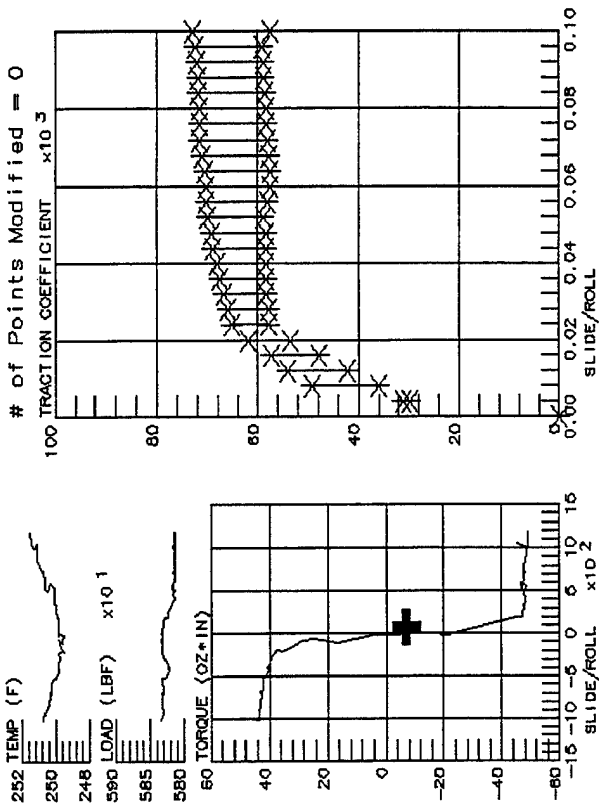
CC 89-180 Vistalube 7
250F 13LBF 152RPM 9 FILE: v1st-11



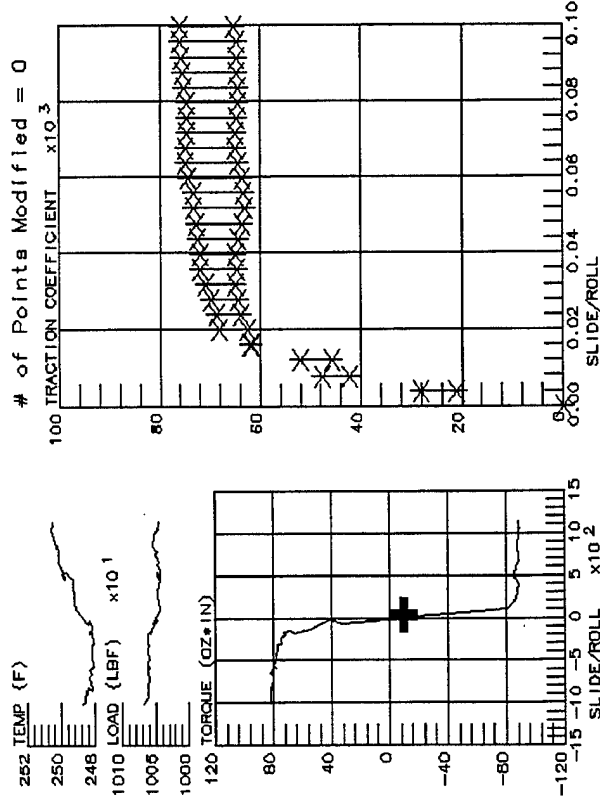
CC 89-180 Vistalube 7 #273
250F 30LBF 152RPM 10 FILE: vist-11



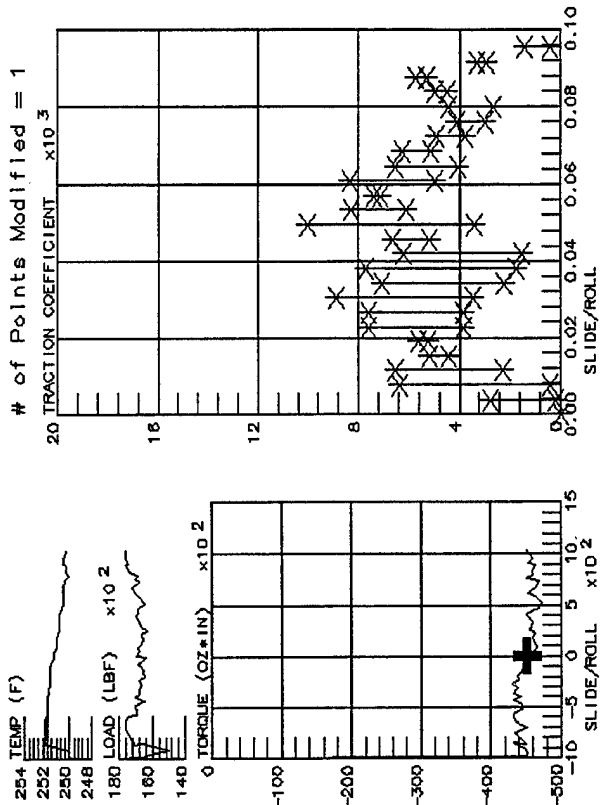
CC 89-180 Vistalube 7 #274
250F 68LBF 152RPM 11 FILE: vist-11



CC 89-180 Vistalube 7 #275
250F 100LBF 152RPM 12 FILE: vist-11

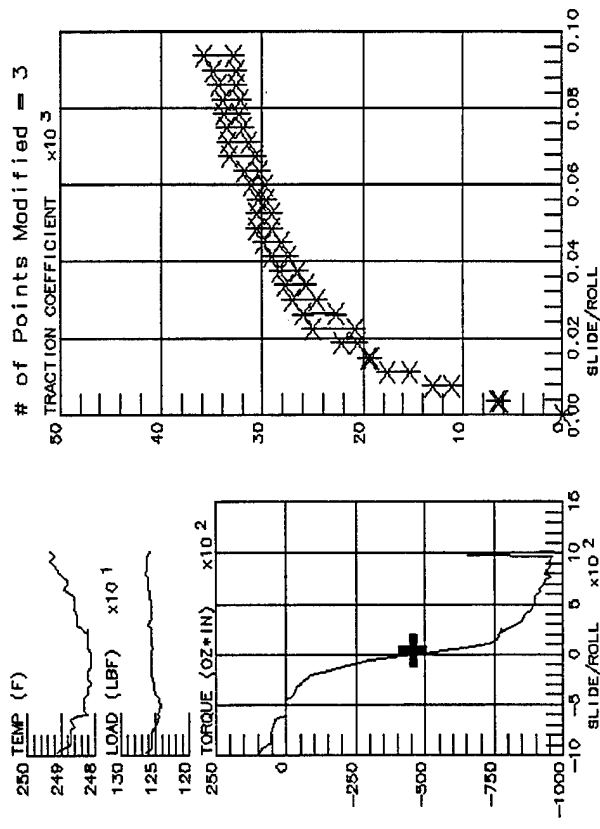
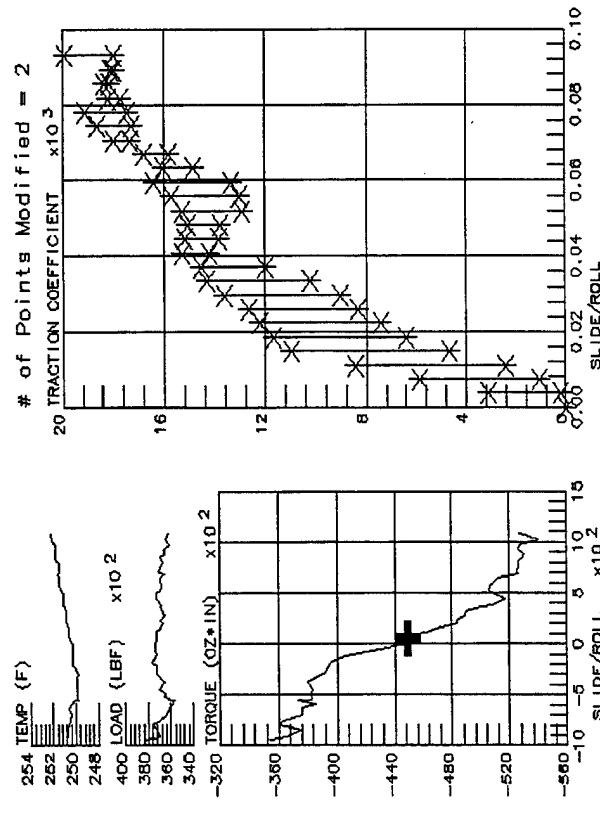


CC 89-180 Vistalube 7 #276
250F 2LBF 343RPM 13 FILE: vist-11



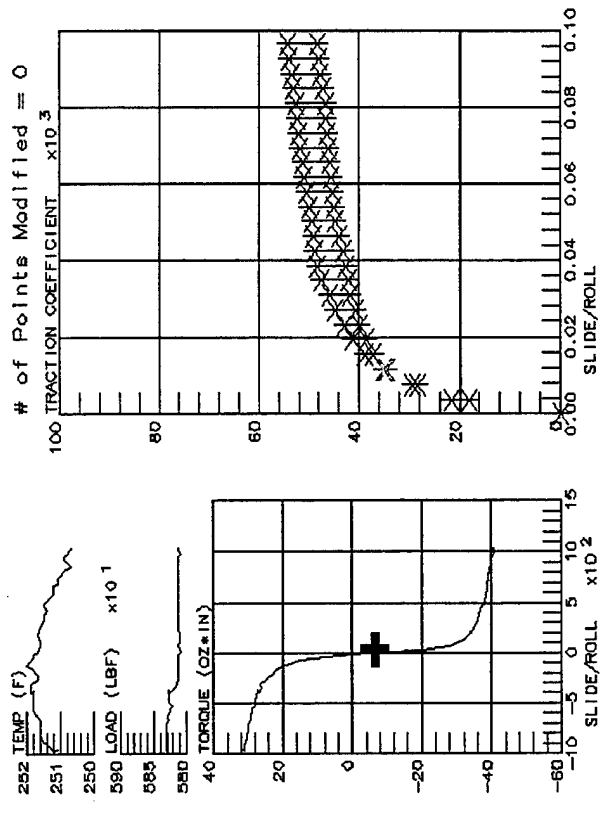
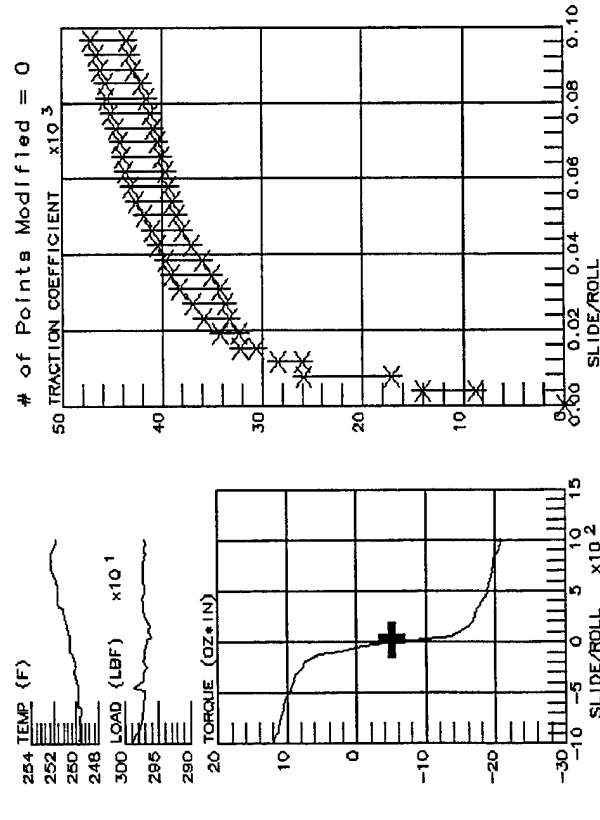
CC 89-180 Vistalube 7
250F 4LBF 343RPM 14 FILE: vist-11

CC 89-180 Vistalube 7
250F 13LBF 343RPM 15 FILE: vist-11

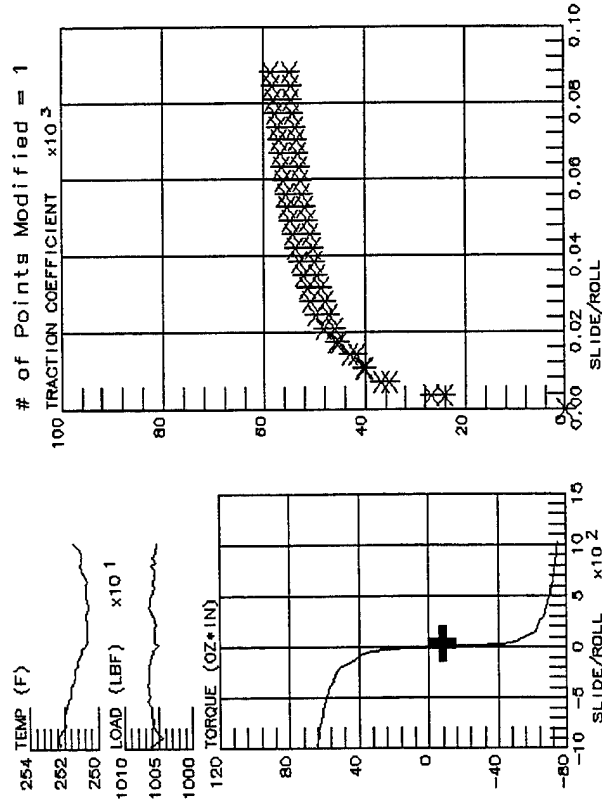


CC 89-180 Vistalube 7
250F 30LBF 343RPM 16 FILE: vist-11

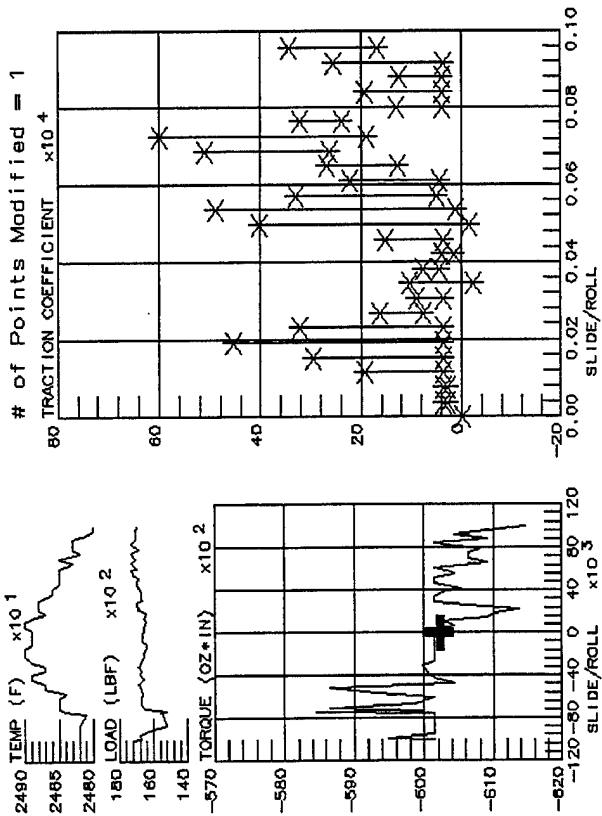
CC 89-180 Vistalube 7
250F 58LBF 343RPM 17 FILE: vist-11



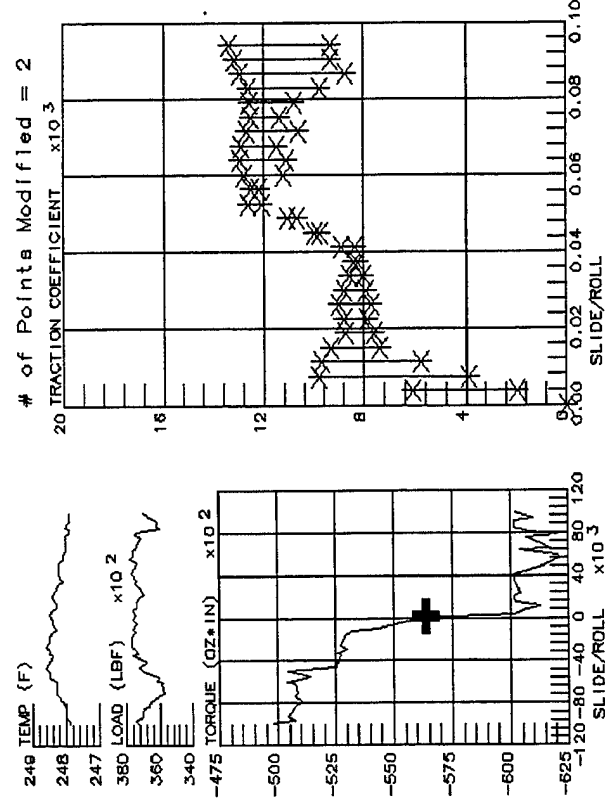
CC 89-180 Vistalube 7 #291
250F 100LBF 343RPM 18 FILE: v1st-11



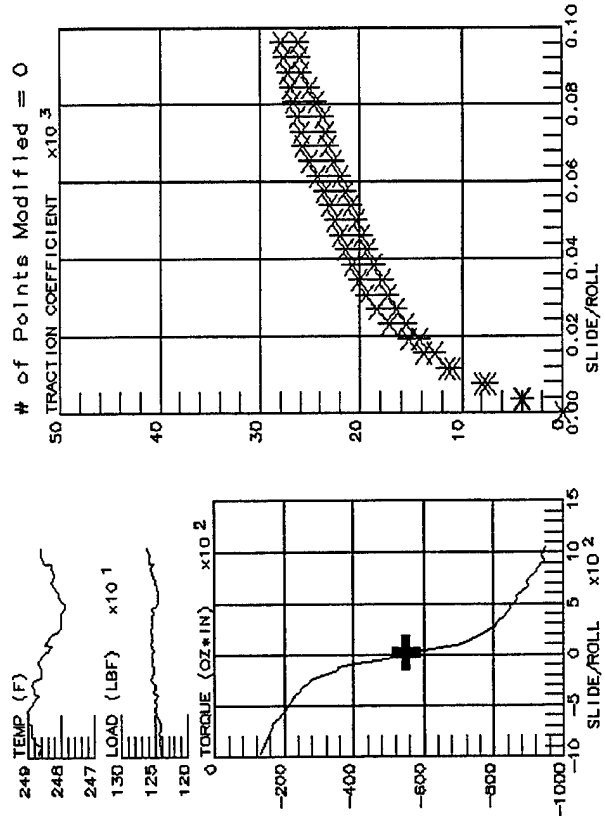
CC 89-180 Vistalube 7 #282
250F 2LBF 650RPM 19 FILE: v1st-11



CC 89-180 Vistalube 7 #283
250F 4LBF 650RPM 20 FILE: v1st-11



CC 89-180 Vistalube 7 #284
250F 13LBF 650RPM 21 FILE: v1st-11

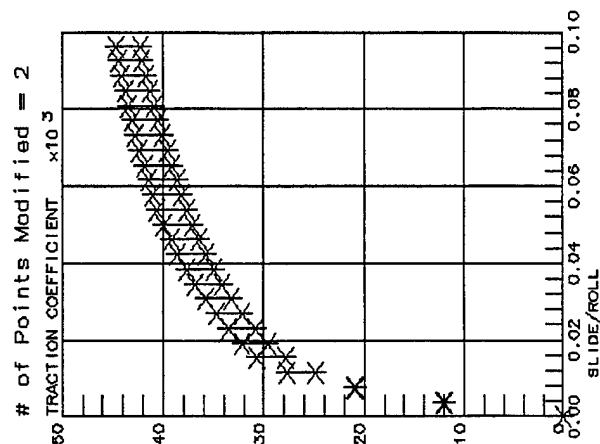
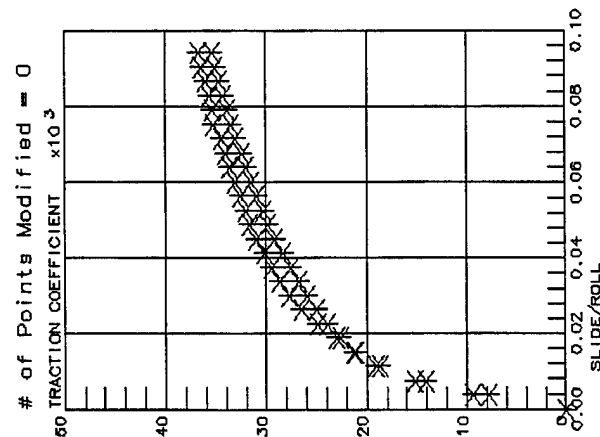
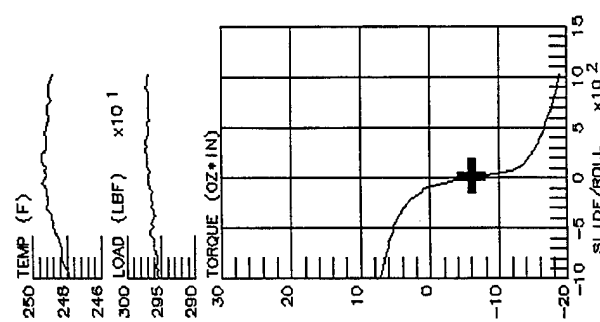


CC 89-180 Vistalube 7
250F 30LBF 650RPM 22 FILE: v1st-11

#285
250F 58LBF 650RPM 23 FILE: v1st-11

of Points Modified = 0

of Points Modified = 2

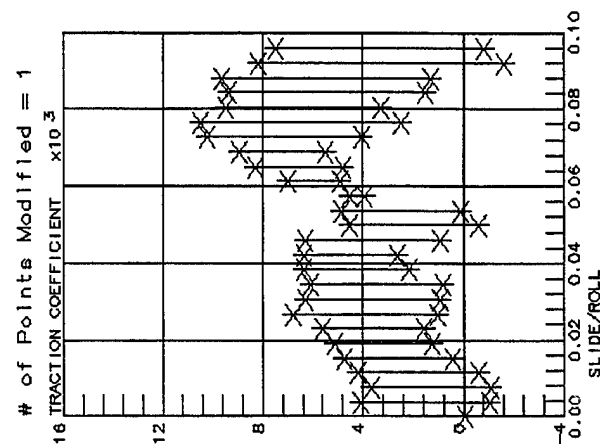
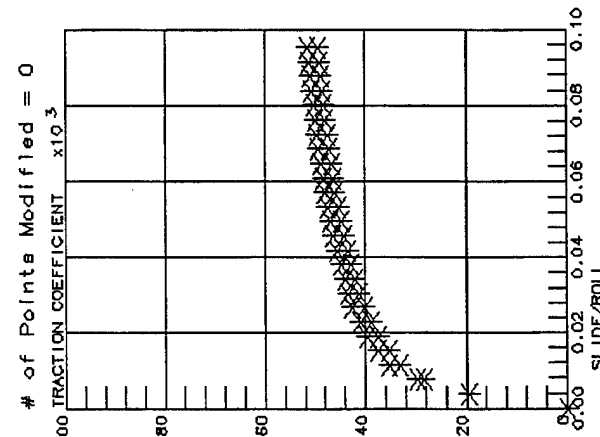
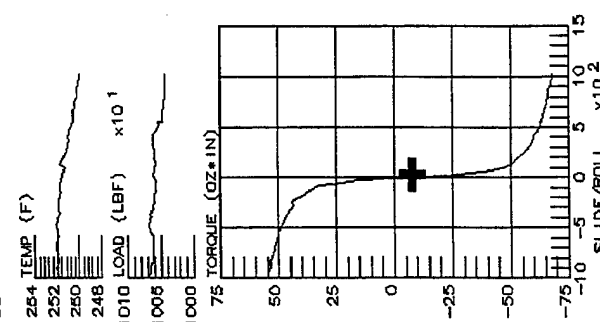


CC 89-180 Vistalube 7
250F 100LBF 650RPM 24 FILE: v1st-11

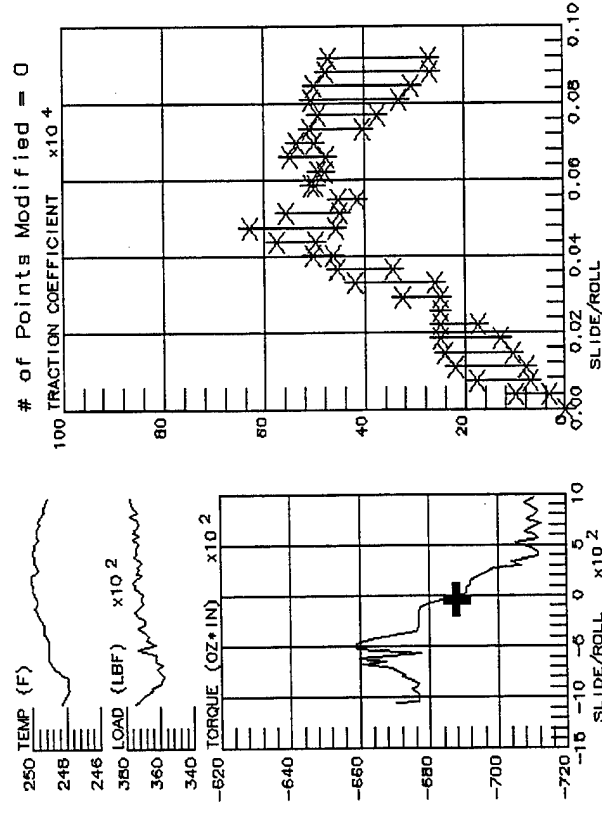
#287
250F 2LBF 1260RPM 25 FILE: v1st-11

of Points Modified = 0

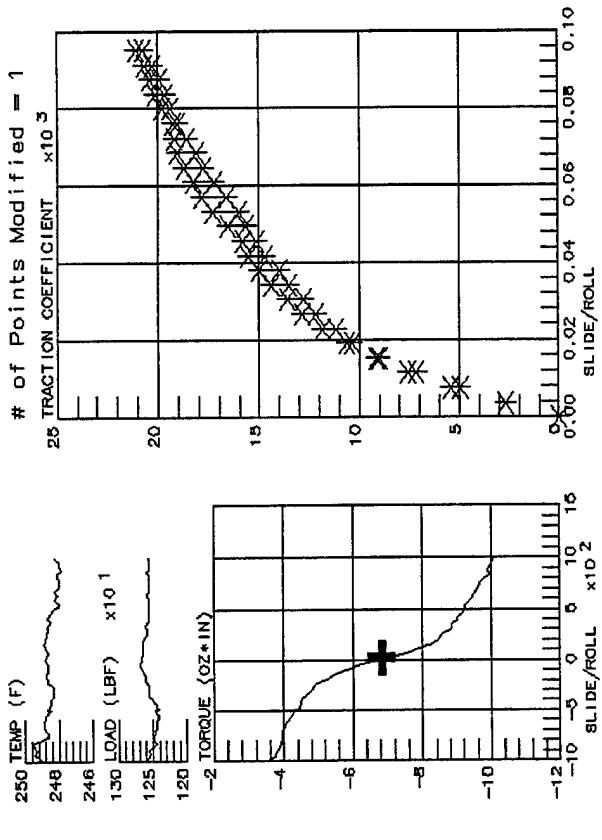
of Points Modified = 1



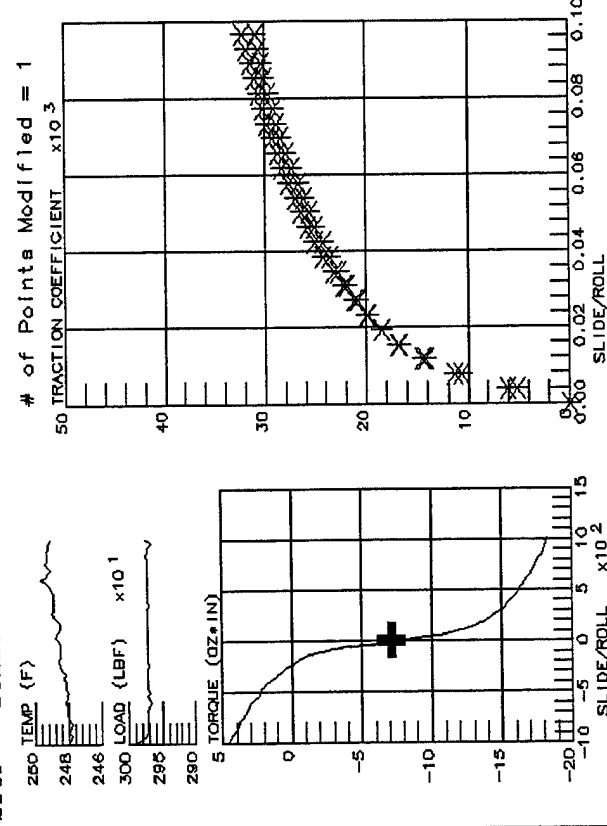
CC 89-180 Vistalube 7 #289
250F 4LBF 1260RPM 26 FILE: v1st-11



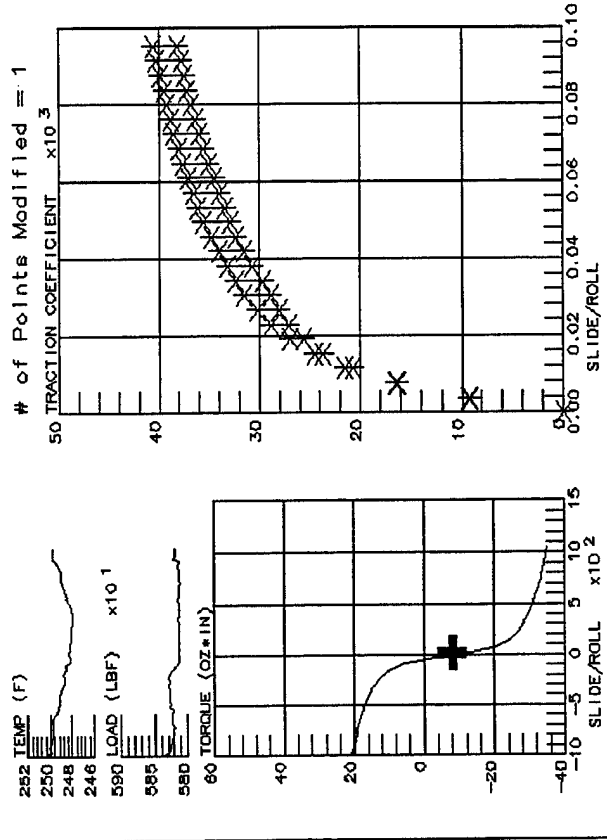
CC 89-180 Vistalube 7 #290
250F 13LBF 1260RPM 27 FILE: v1st-11



CC 89-180 Vistalube 7 #291
250F 30LBF 1260RPM 28 FILE: v1st-11

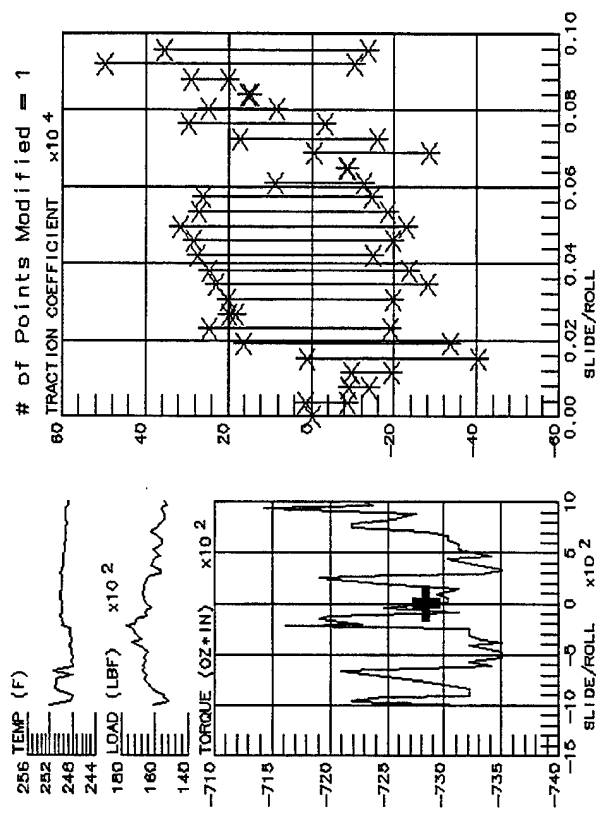
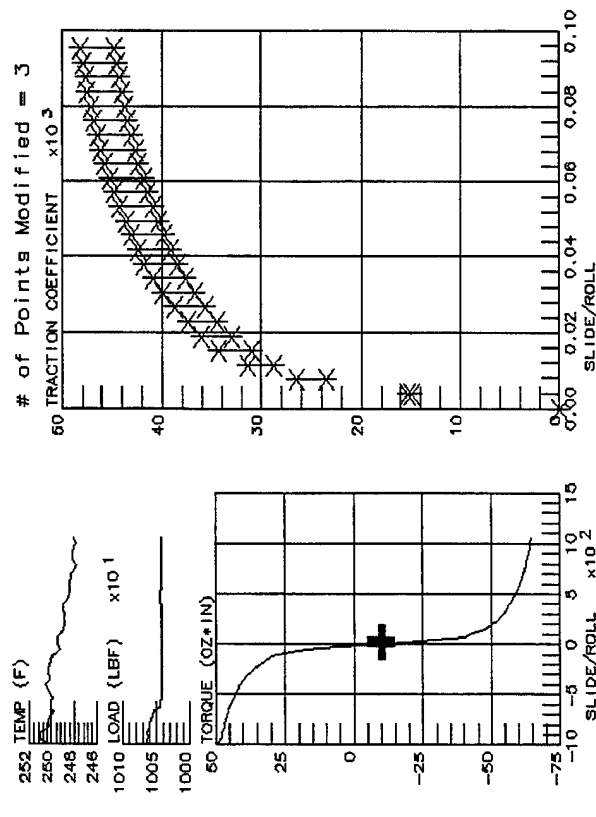


CC 89-180 Vistalube 7 #292
250F 58LBF 1260RPM 29 FILE: v1st-11



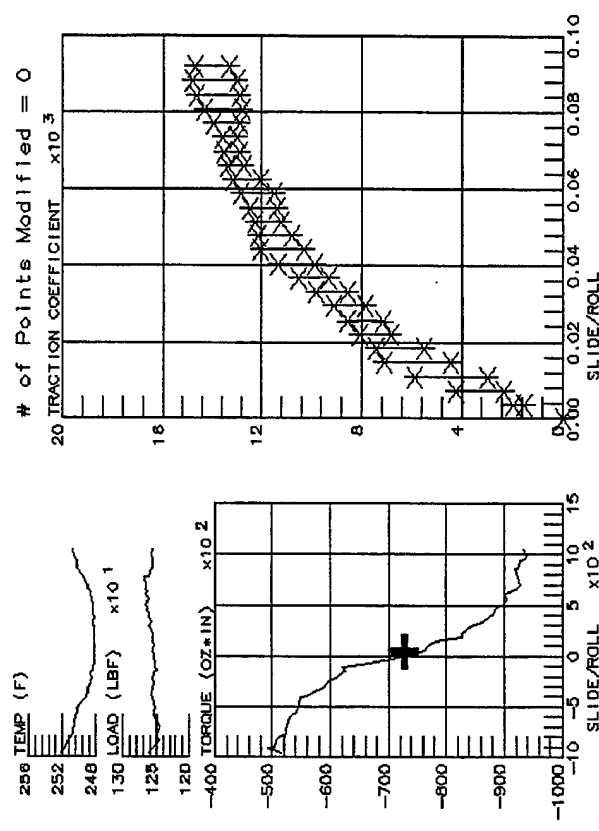
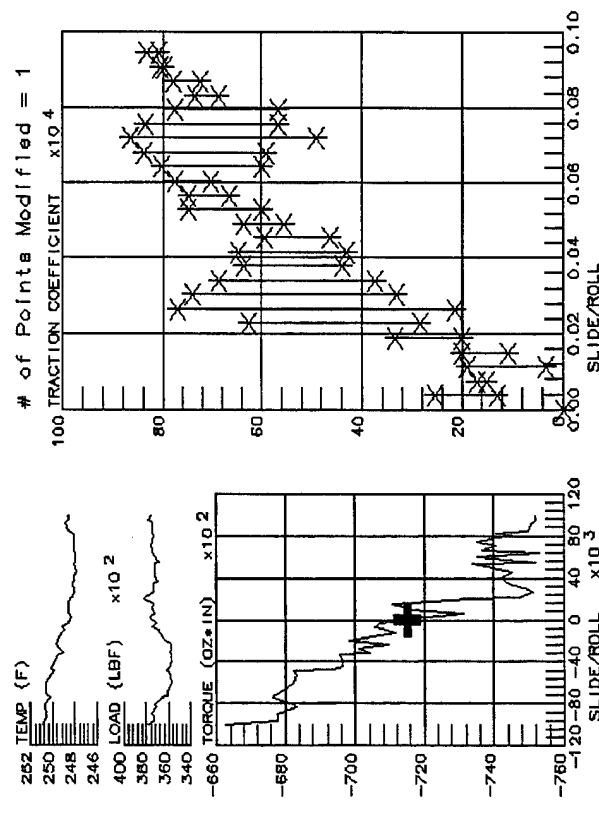
CC 89-180 Vistalube 7
250F 100LBF 1260RPM 30 FILE: v1st-11

#293
250F 2LBF 2559RPM 31 FILE: v1st-11



CC 89-180 Vistalube 7
250F 4LBF 2559RPM 32 FILE: v1st-11

#295
250F 13LBF 2559RPM 33 FILE: v1st-11

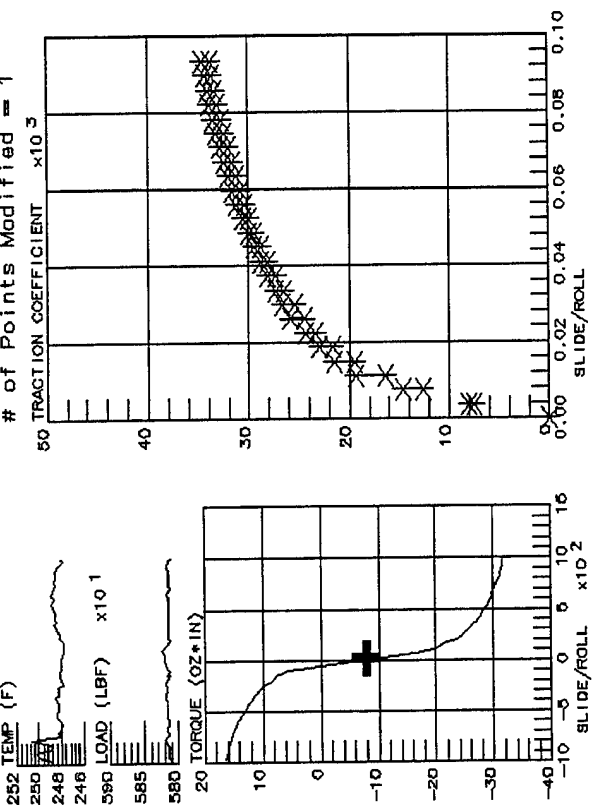
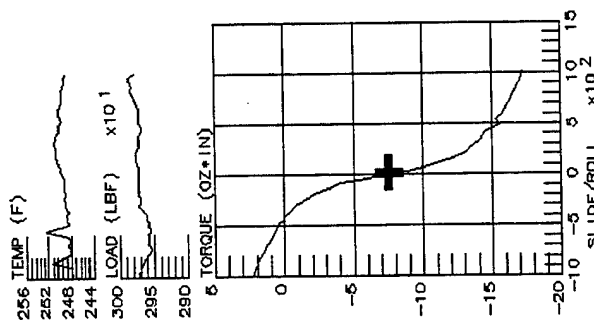


CC 89-180 Vistalube 7
250F 30LBF 2559RPM 34 FILE: v1st-11

#297
CC 89-180 Vistalube 7
250F 58LBF 2559RPM 35 FILE: v1st-11

of Points Modified = 1

of Points Modified = 1

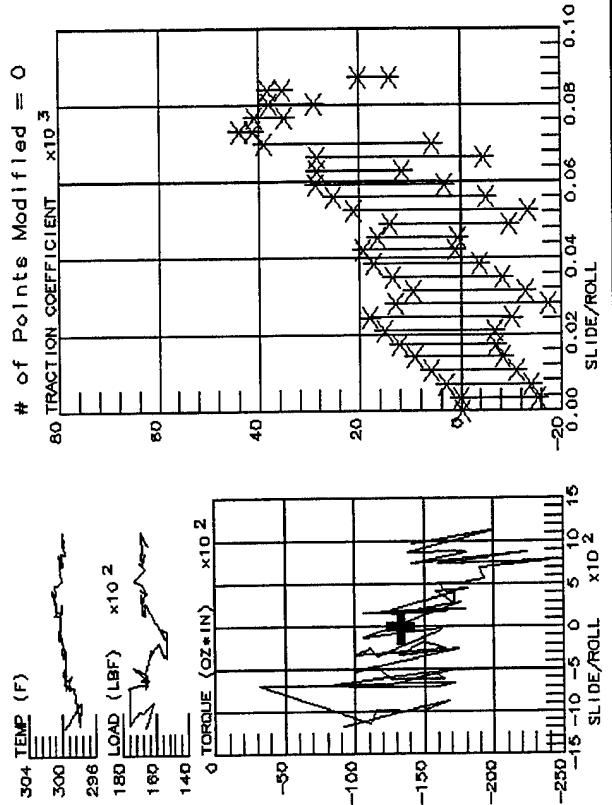
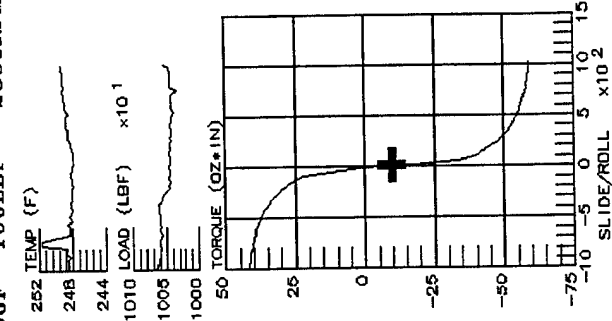


CC 89-180 Vistalube 7
250F 100LBF 2559RPM 36 FILE: v1st-11

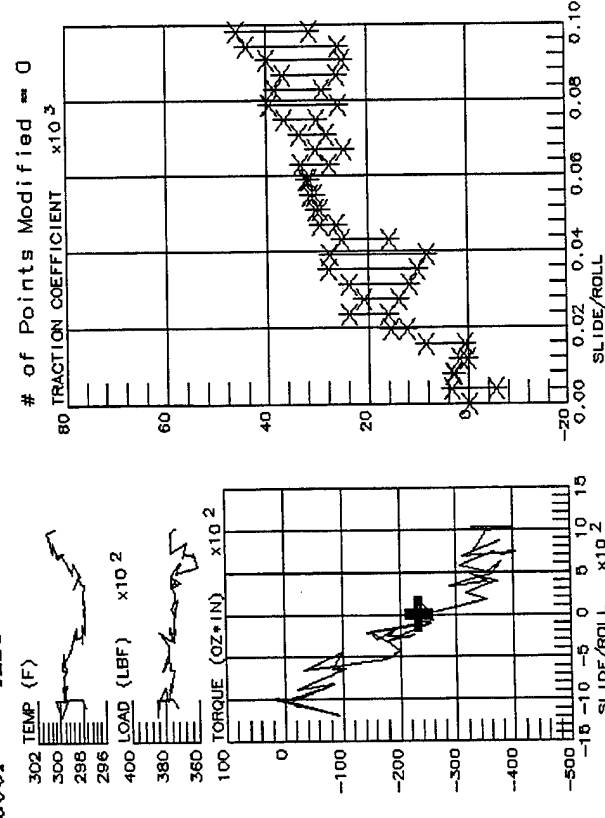
#299
CC 89-180 Vistalube 7
300F 2LBF 76RPM 1 FILE: v1st-12

of Points Modified = 0

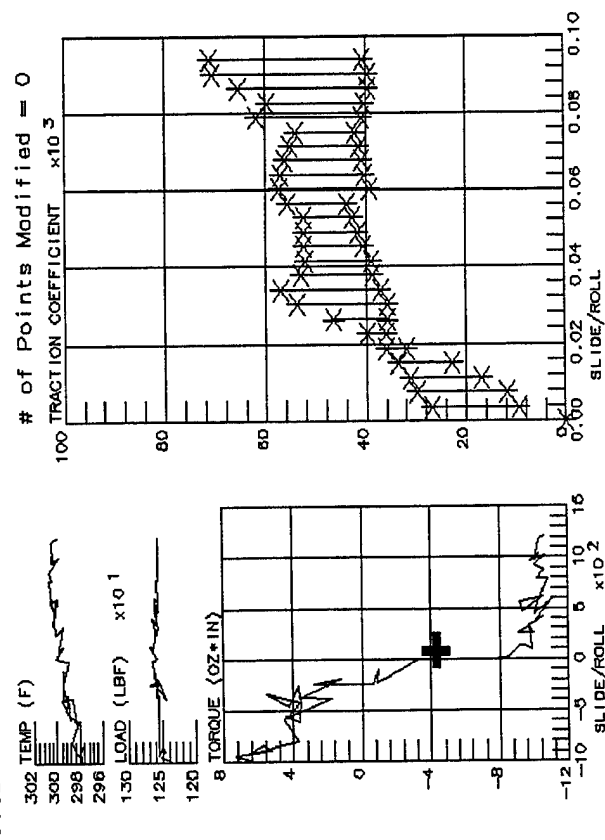
of Points Modified = 0



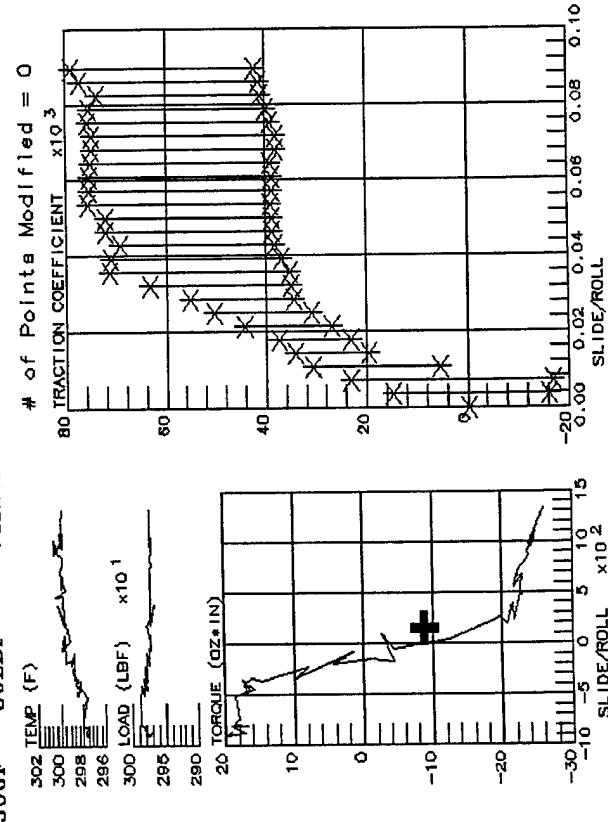
CC 89-180 Vistalube 7
300F 4LBF 76RPM 2 FILE: v1st-12 #301



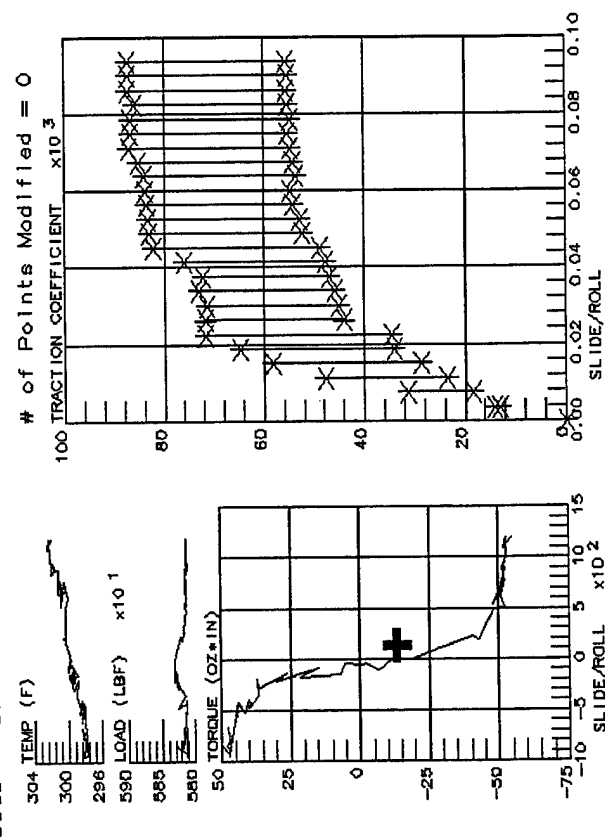
CC 89-180 Vistalube 7
300F 13LBF 76RPM 3 FILE: v1st-12 #302



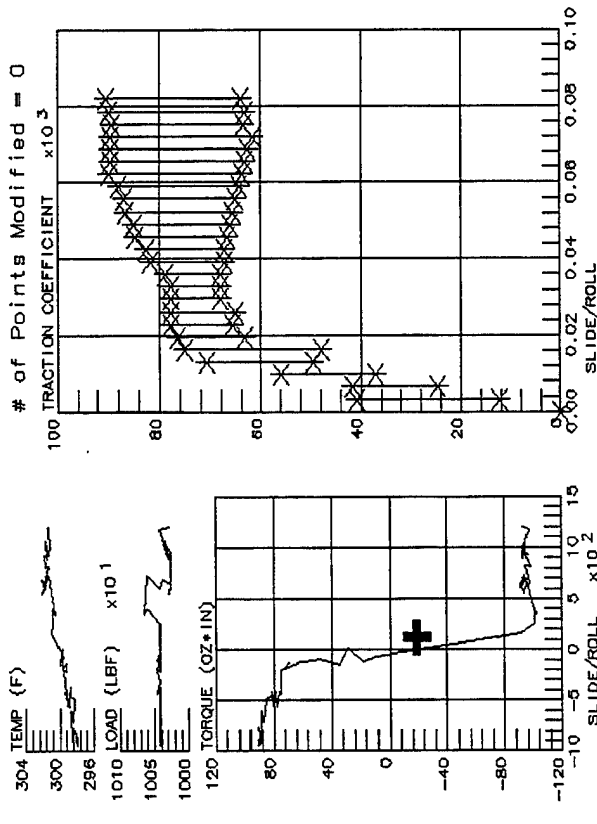
CC 89-180 Vistalube 7
300F 30LBF 76RPM 4 FILE: v1st-12 #303



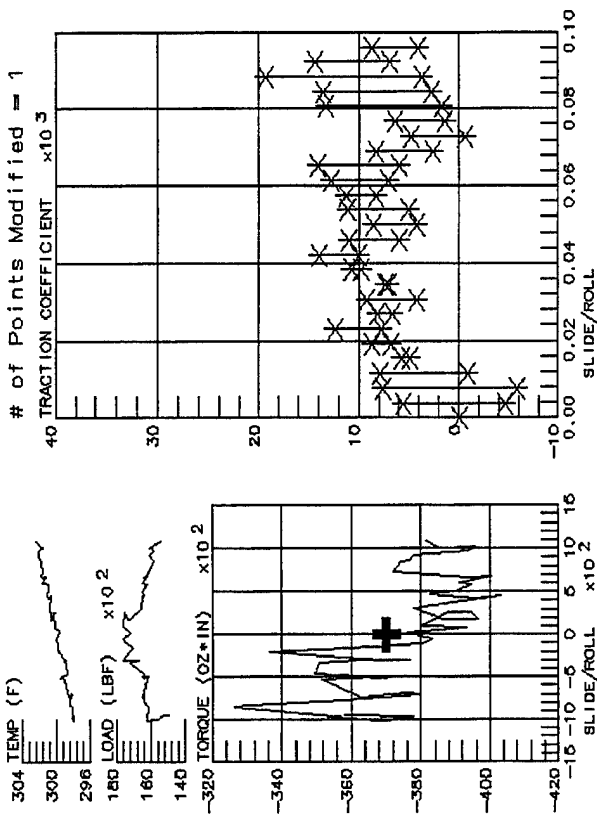
CC 89-180 Vistalube 7
300F 58LBF 76RPM 5 FILE: v1st-12 #304



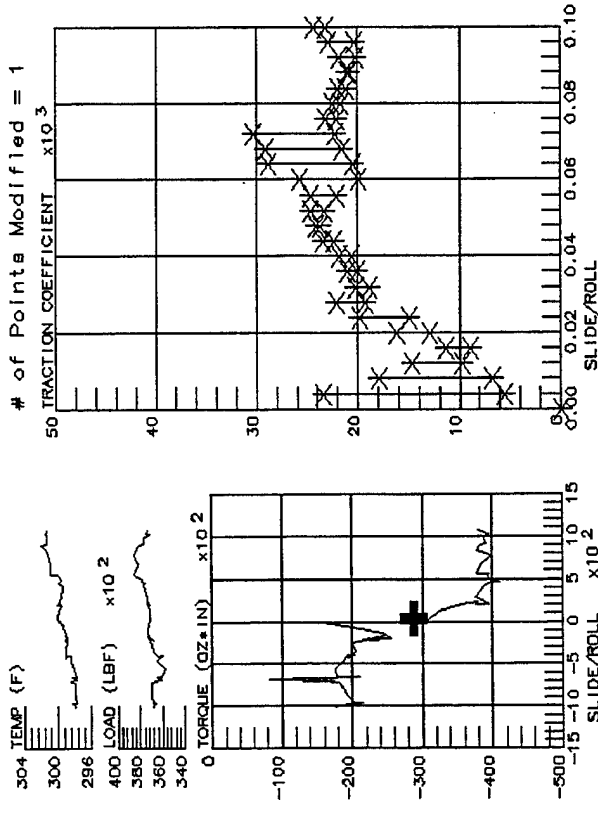
CC 89-180 Vistalube 7
300F 100LBF 76RPM 6 FILE: v1st-12 #305



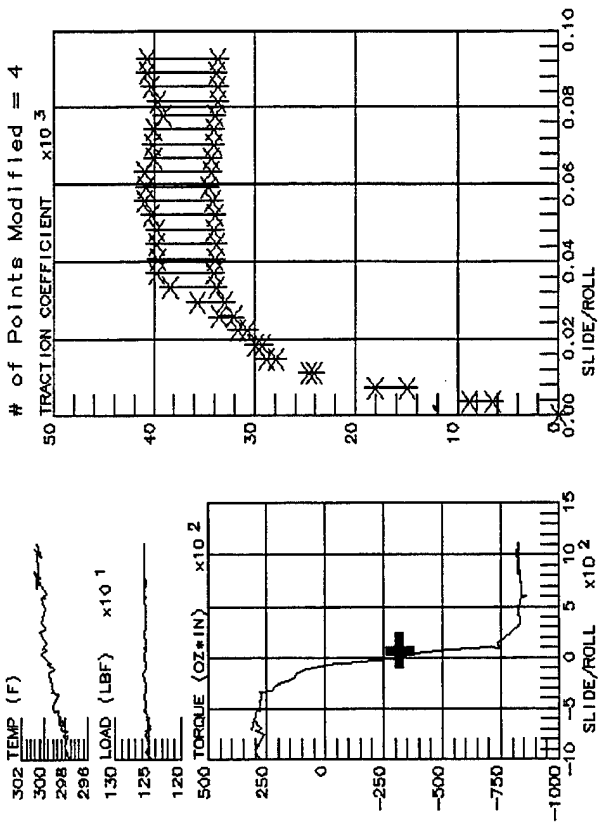
CC 89-180 Vistalube 7
300F 2LBF 152RPM 7 FILE: v1st-12 #306

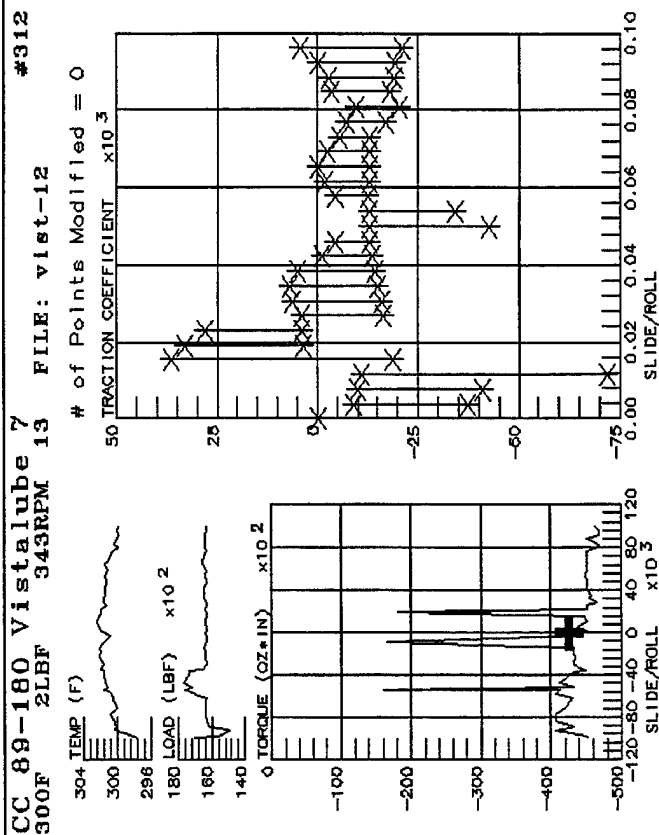
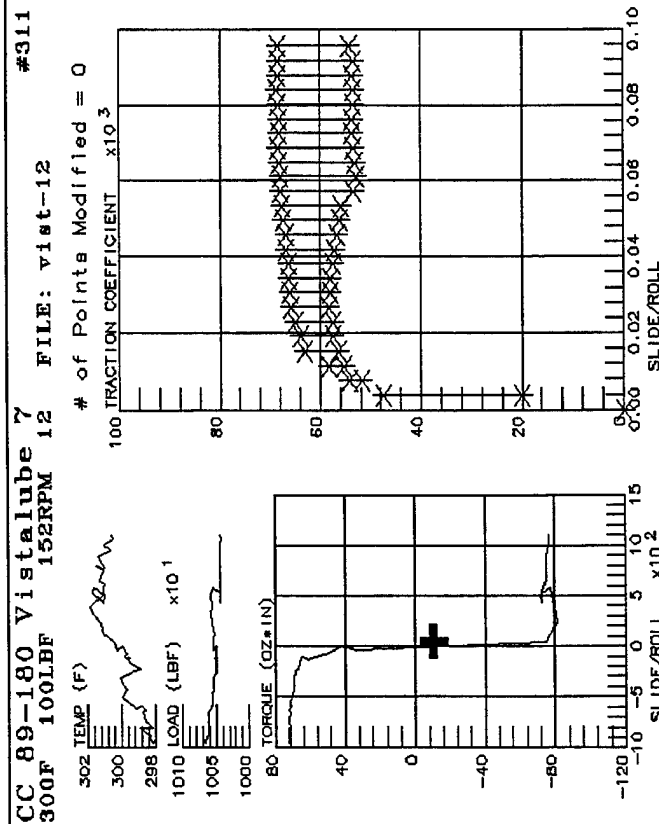
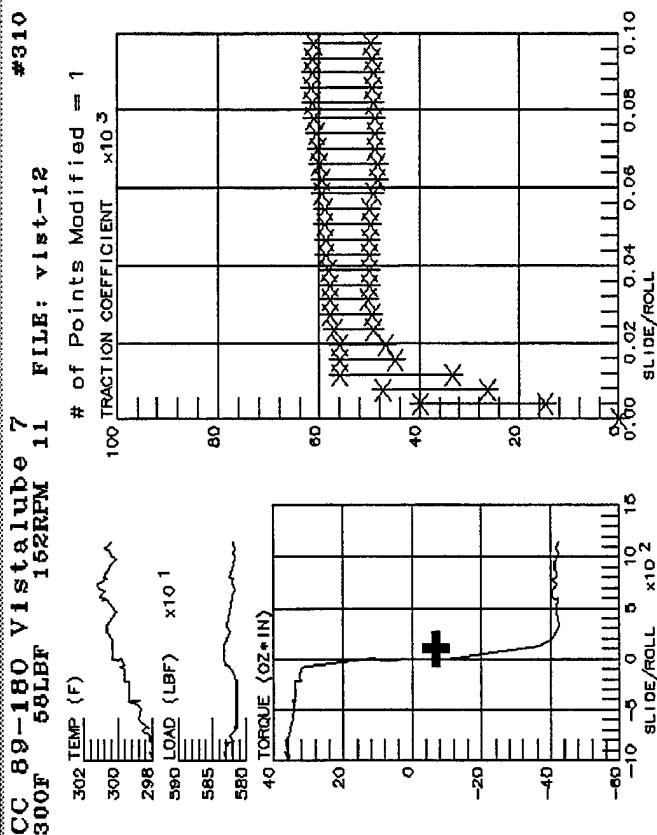
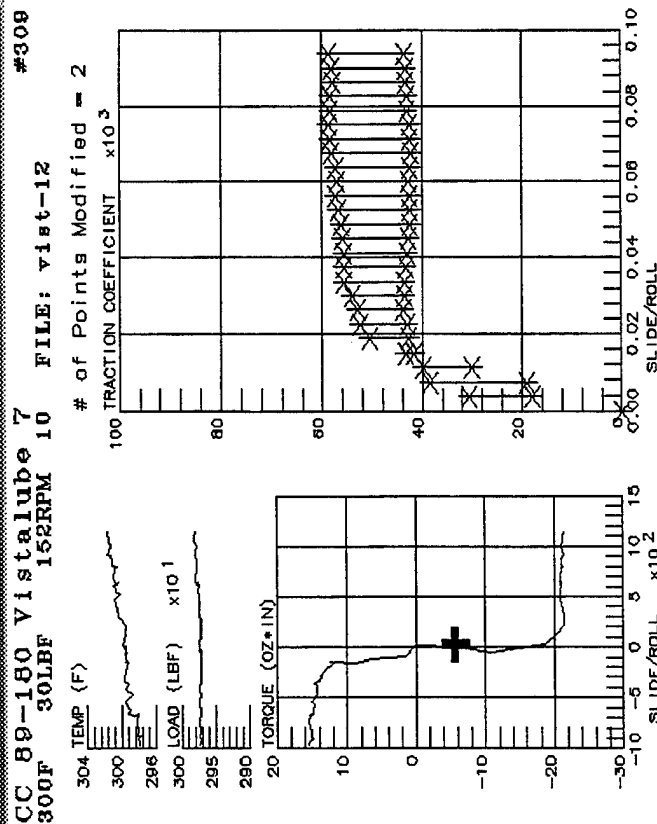


CC 89-180 Vistalube 7
300F 4LBF 152RPM 8 FILE: v1st-12 #307



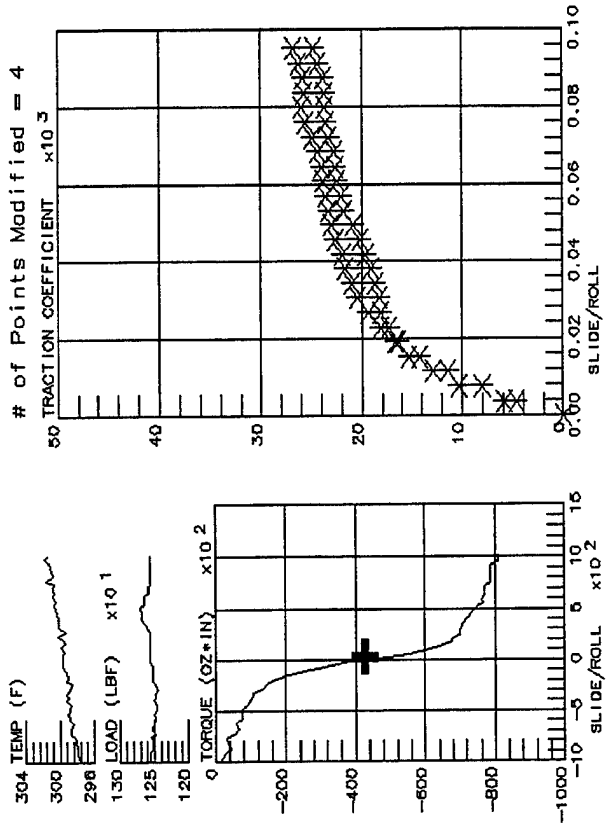
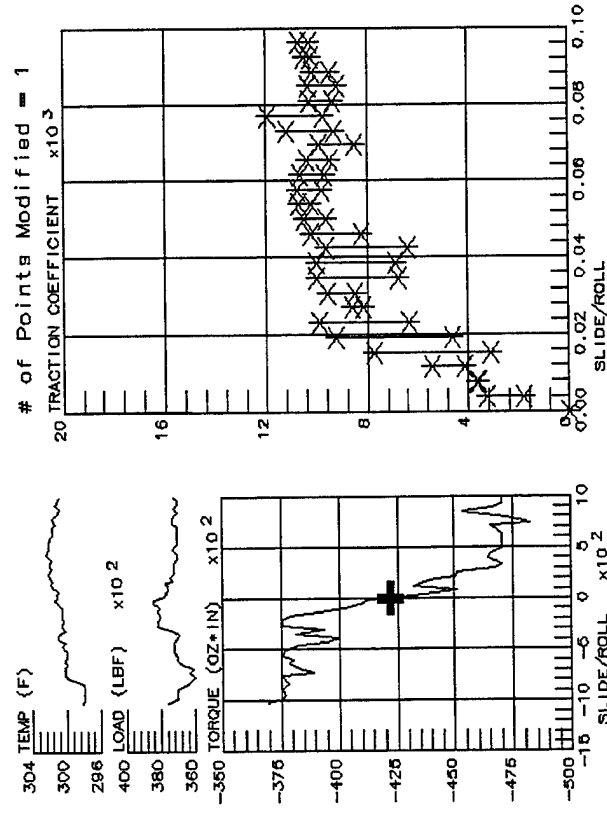
CC 89-180 Vistalube 7
300F 13LBF 152RPM 9 FILE: v1st-12 #308





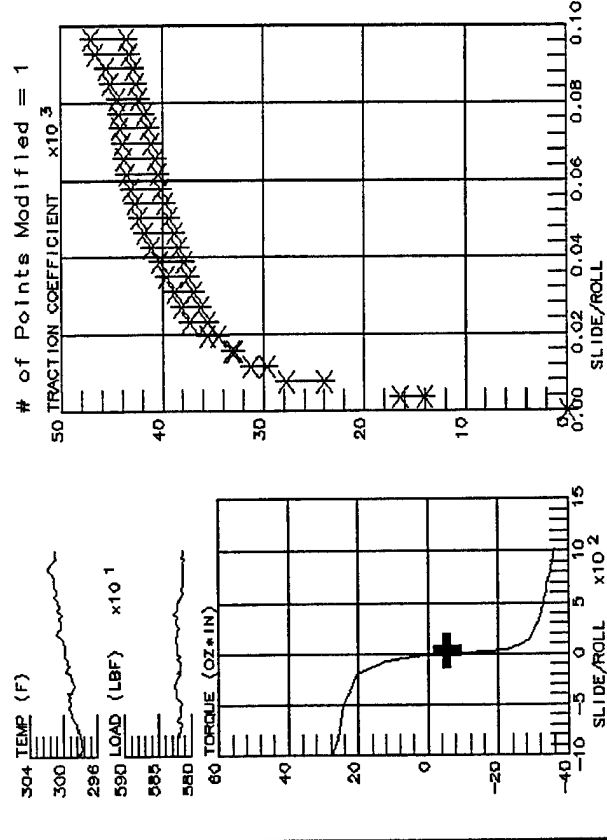
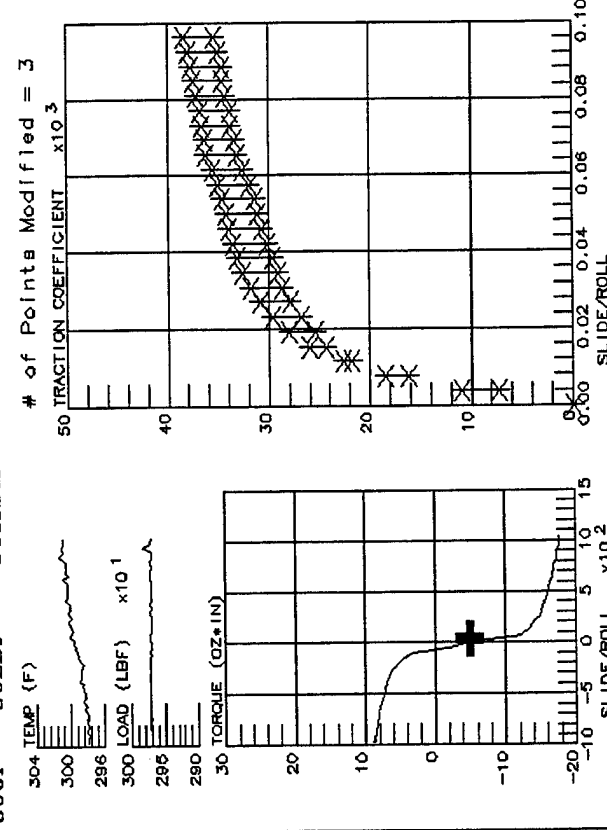
CC 89-180 Vistalube 7
300F 4LBF 343RPM 14 FILE: v1st-12

#313
of Points Modified = 1



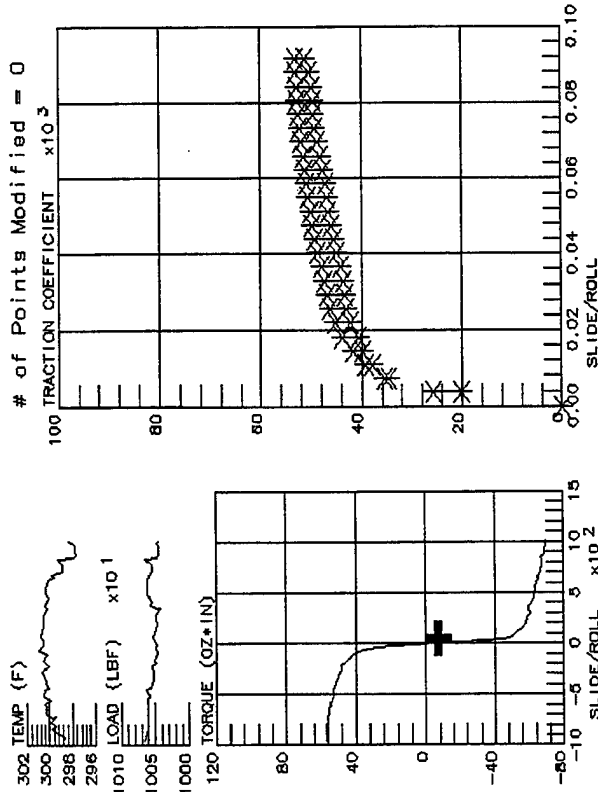
CC 89-180 Vistalube 7
300F 30LBF 343RPM 16 FILE: v1st-12

#315
of Points Modified = 3



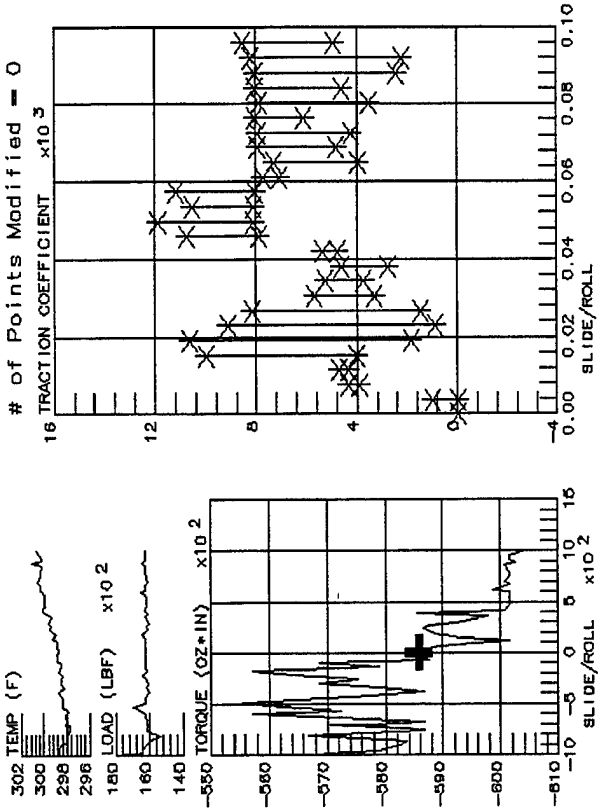
CC 89-180 Vistalube 7
300F 100LBF 343RPM 18 FILE: v1st-12

of Points Modified = 0



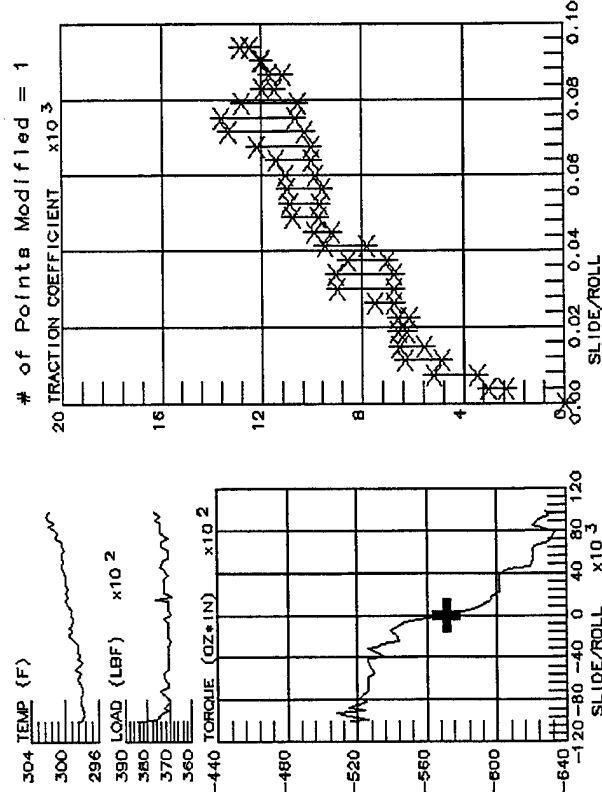
CC 89-180 Vistalube 7
300F 2LBF 660RPM 19 FILE: v1st-12

of Points Modified = 0



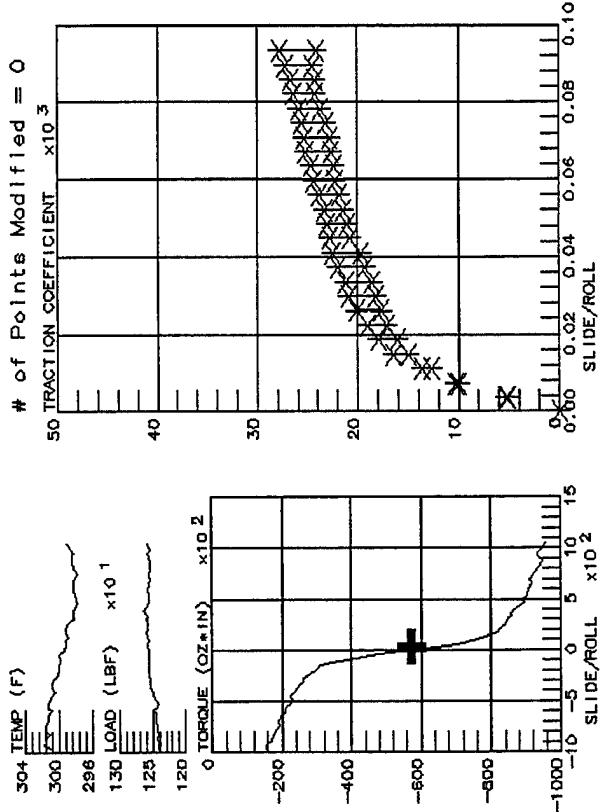
CC 89-180 Vistalube 7
300F 4LBF 650RPM 20 FILE: v1st-12

of Points Modified = 1

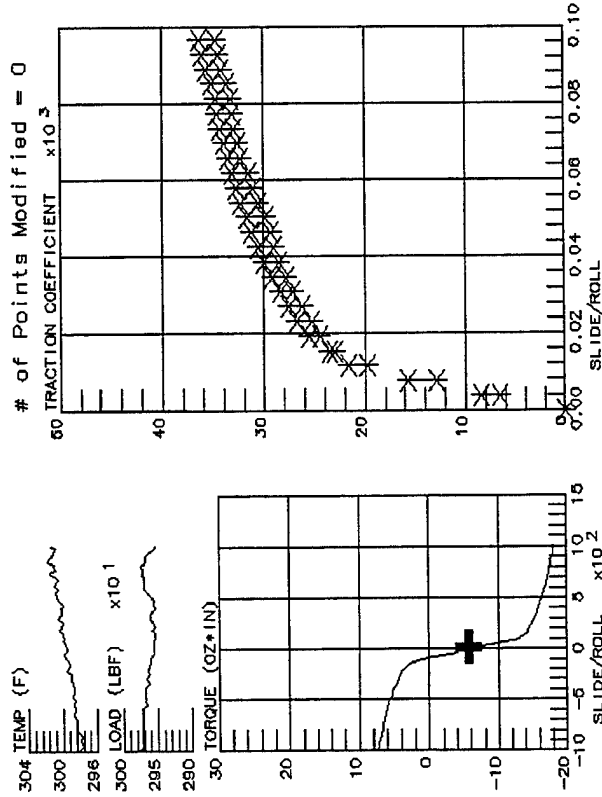


CC 89-180 Vistalube 7
300F 13LBF 650RPM 21 FILE: v1st-12

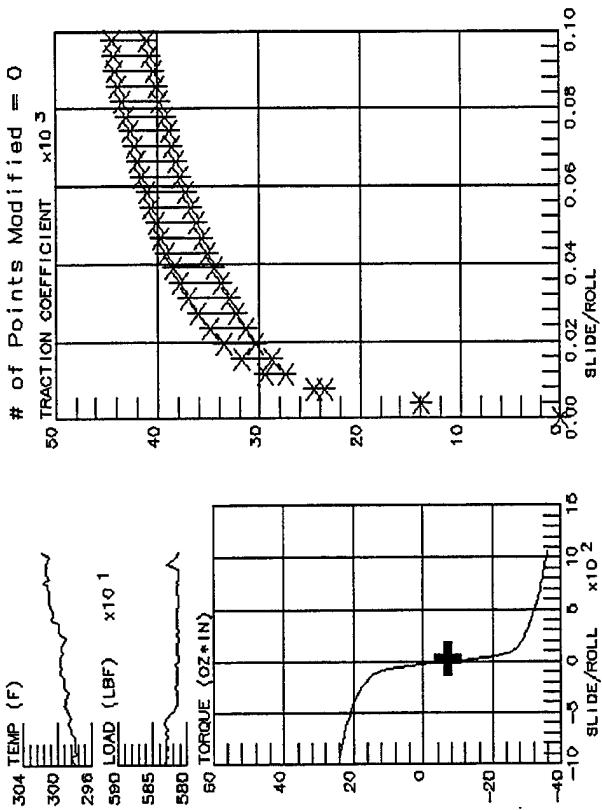
of Points Modified = 0



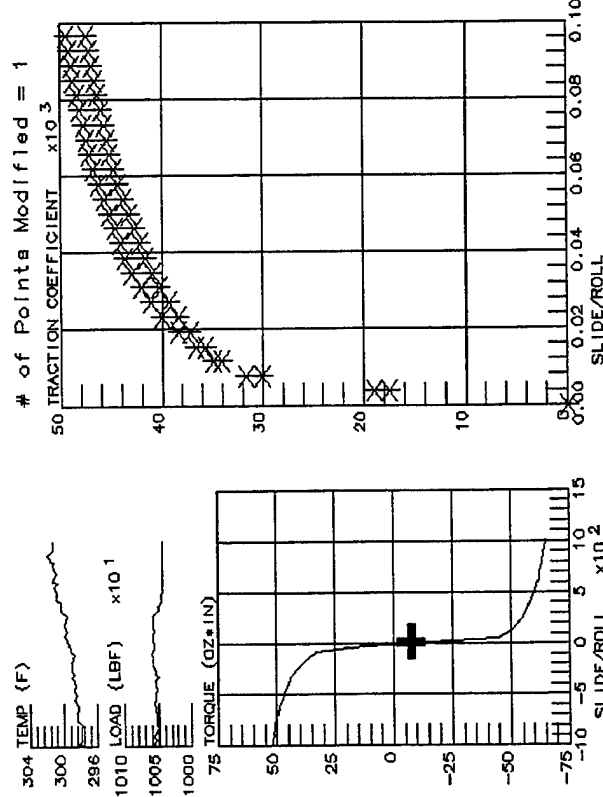
CC 89-180 Vistalube 7
300F 30LBF 650RPM 22 FILE: v1st-12 #321



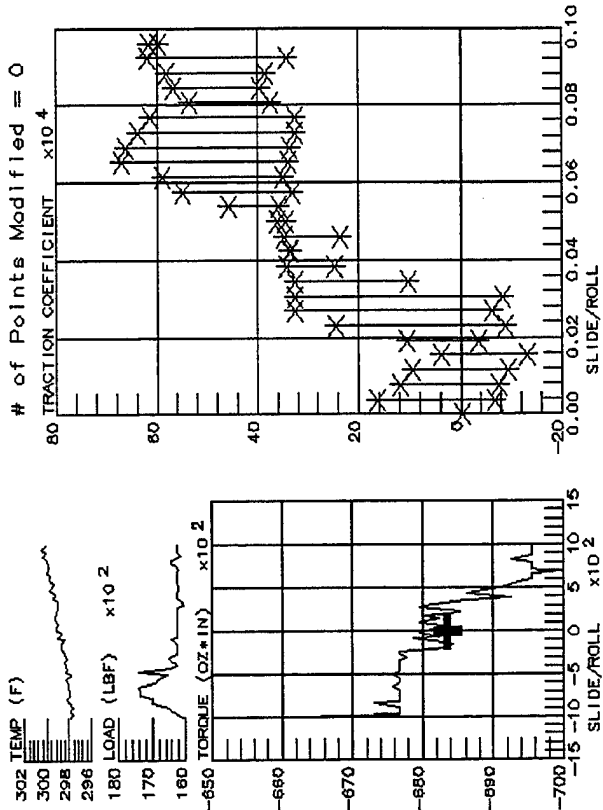
CC 89-180 Vistalube 7
300F 58LBF 650RPM 23 FILE: v1st-12 #322



CC 89-180 Vistalube 7
300F 100LBF 650RPM 24 FILE: v1st-12 #323

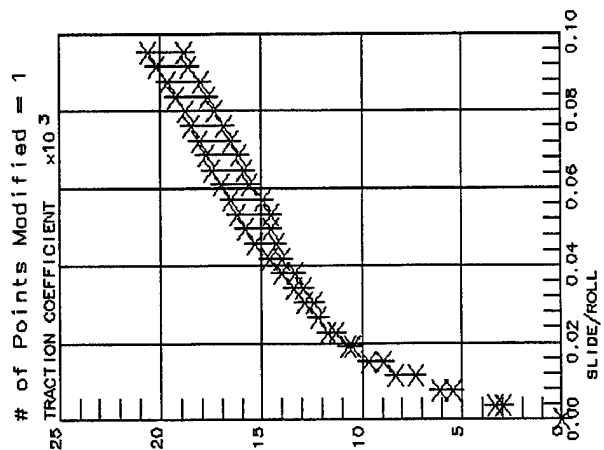
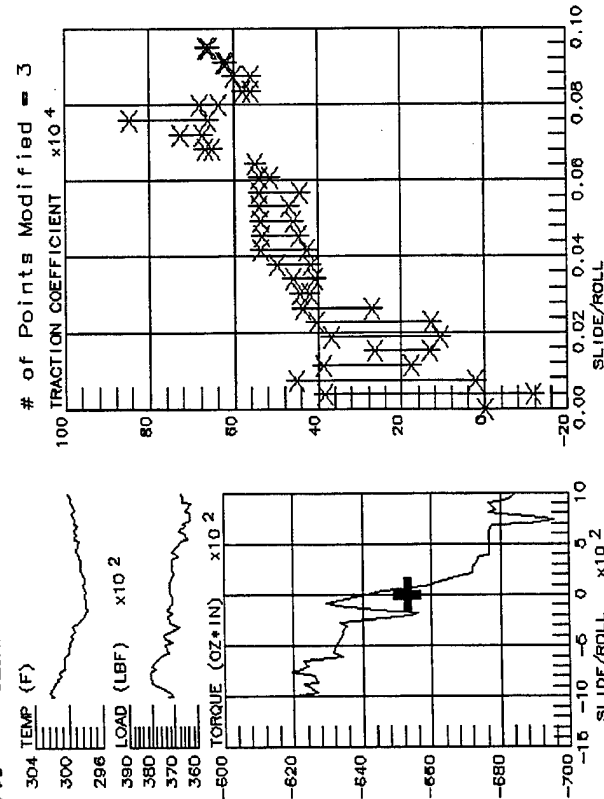


CC 89-180 Vistalube 7
300F 2LBF 1280RPM 25 FILE: v1st-12 #324



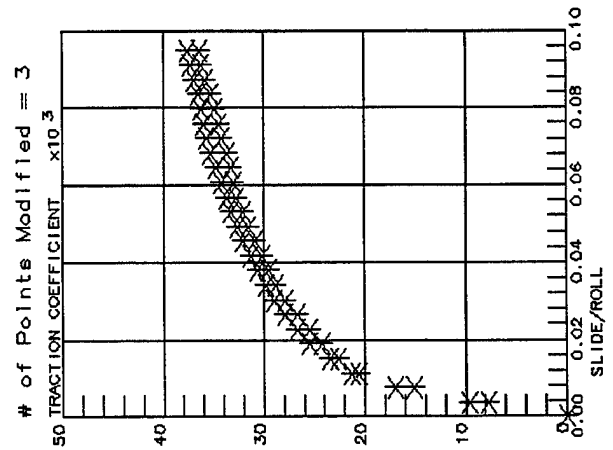
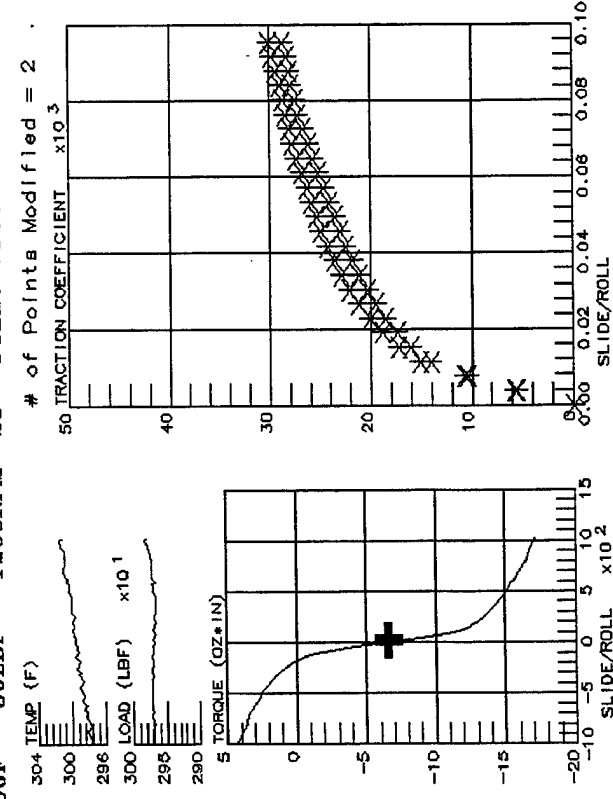
CC 89-180 Vistalube 7
300F 4LBF 1260RPM 26 FILE: v1st-12

#325
300F 13LBF 1260RPM 27 FILE: v1st-12

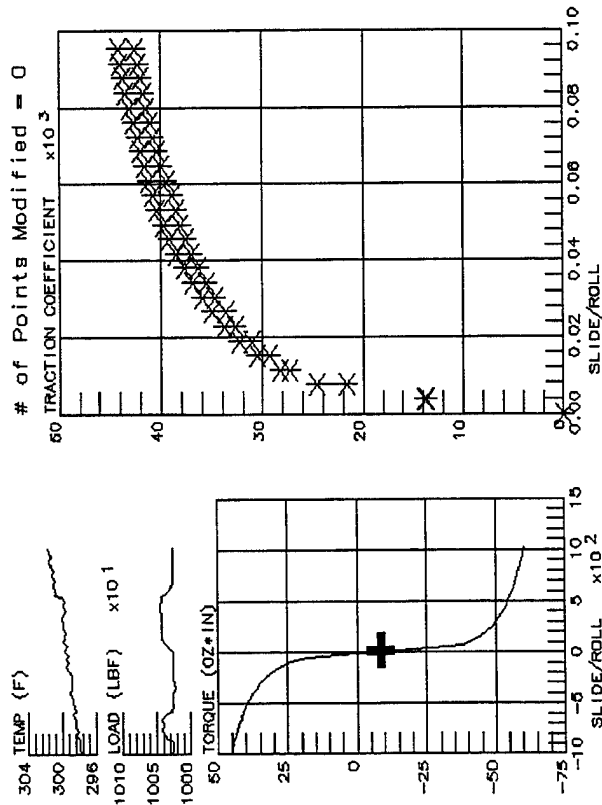


CC 89-180 Vistalube 7
300F 30LBF 1260RPM 28 FILE: v1st-12

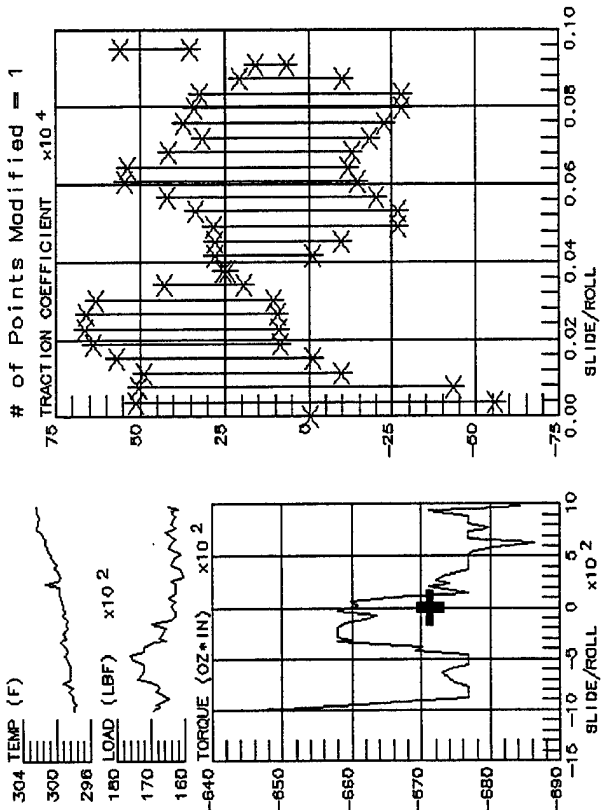
#327
300F 56LBF 1260RPM 29 FILE: v1st-12



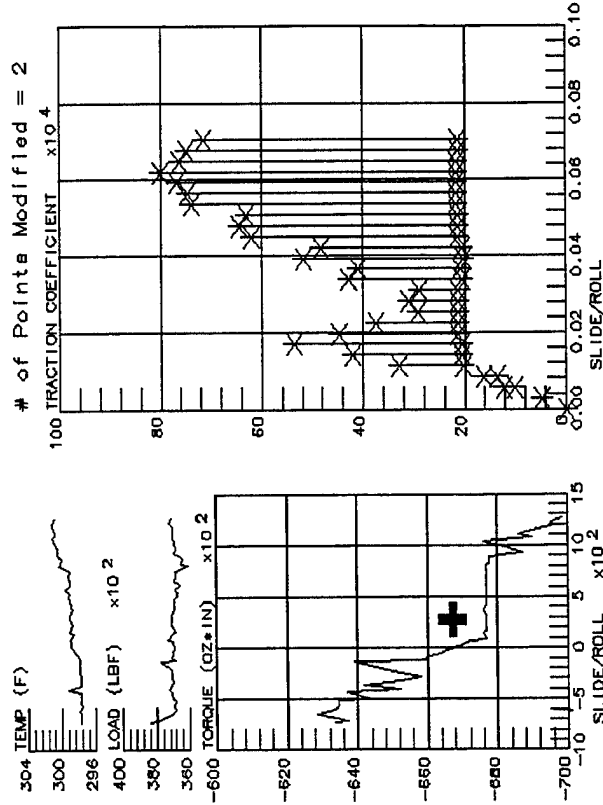
CC 89-180 Vistalube 7 #329
300F 100LBF 1260RPM 30 FILE: v1st-12



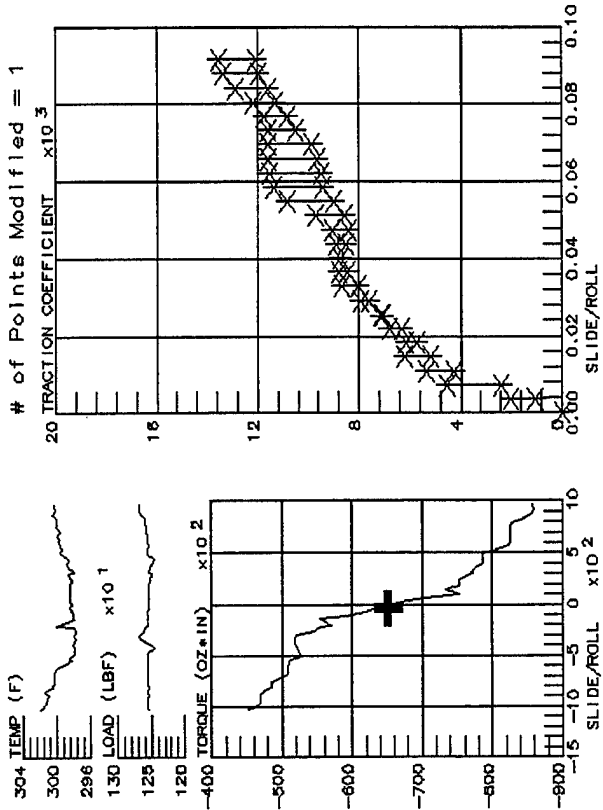
CC 89-180 Vistalube 7 #330
300F 2LBF 2559RPM 31 FILE: v1st-12



CC 89-180 Vistalube 7 #331
300F 4LBF 2559RPM 32 FILE: v1st-12



CC 89-180 Vistalube 7 #332
300F 13LBF 2559RPM 33 FILE: v1st-12

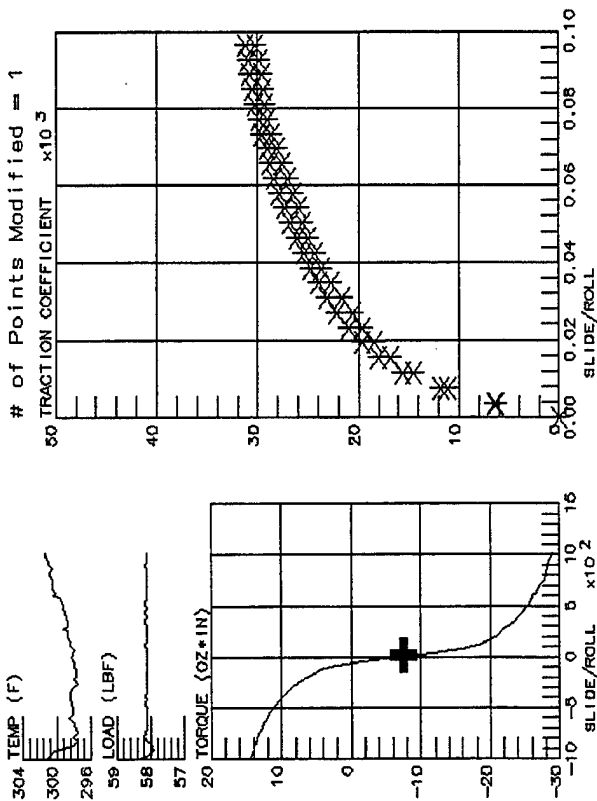
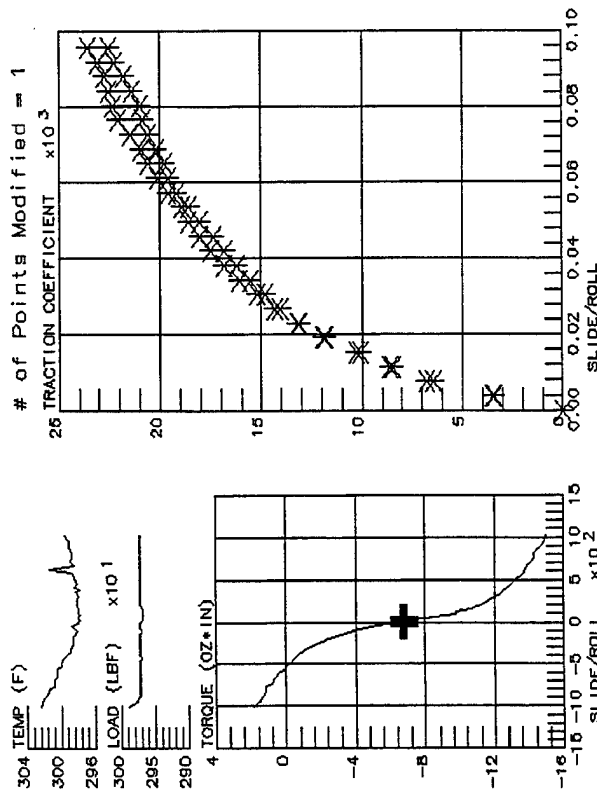


CC 89-180 Vistalube 7
300F 30LBF 2559RPM 34 FILE: v1st-12

#333
300F 58LBF 2559RPM 35 FILE: v1st-12

of Points Modified = 1

of Points Modified = 1



CC 89-180 Vistalube 7
300F 100LBF 2559RPM 36 FILE: v1st-12

#335
300F 58LBF 2559RPM 35 FILE: v1st-12

of Points Modified = 1

of Points Modified = 1

